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THE

BOTANICAL REGISTER:

CONSISTING OF

Coloured Figures

OF

EXOTIC PLANTS,

CULTIVATED IN

BRITISH GARDENS;

WITH THEIR

HISTORY AND MODE OF TREATMENT.

THE DESIGNS BY

Sydenham Edwards,

FELLOW OF THE LINNEAN SOCIETY.

VOL. III.

——viret semper——nec fronde caducâ
Carpitur.

LONDON:
PRINTED FOR JAMES RIDGWAY, PICCADILLY.
1817.

BOT... GARDEN.

S. Gosnell, Printer, Little Queen Street, London.

APPENDIX TO THE CATALOGUES OF BOOKS

IN THE FIRST AND SECOND VOLUMES;

OR,

List of Books quoted in the Third Volume in addition to those quoted in the First and Second.

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Bigelow flor. bost. A collection of plants of Boston (in America) and its environs, with their generic and specific characters, synonyms, descriptions, places of growth, and time of flowering, and occasional remarks. By Jacob Bigelow, M. D. Boston (America), 1814. 8vo.

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Corn. canad. Jac. Cornuti canadensium plantarum, aliarumque nondum editarum historia. Parisiis, 1635. 4to.

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Forsk. descr. Flora ægyptiaco-arabica, sive descriptiones plantarum quas per Ægyptum inferiorem & Arabiam felicem detexit Petr. Forskål. Havniæ, 1775. 4to.

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Ponted. diss. Pontedera, Jul. Dissertationes botanicæ 5—11; impressæ cum Anthologiâ. Patav. 1720. 4to.

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Syd Edwards del. Pub by J Ridgway & Sons 170 Piccadilly Nov 1 1817 Smith sc

JASMINUM revolutum.

East Indian Highland Jasmine.

DIANDRIA *MONOGYNIA.*

Nat. ord. Jasmineæ. *Jussieu gen.* 104. *Div. II.* Fructus baccatus.
Jasmineæ. *Brown prod.* 350.
JASMINUM. *Suprà vol.* 1. *fol.* 1.

Div. Foliis compositis.

J. *revolutum*, erectum; foliis impari-pinnatis, subtrijugis, foliolis ovato-lanceolatis, subpetiolatis; cymis terminalibus pauci-plurifloris laxis: antheris mucronatis tubo partim exsertis.

Jasminum revolutum. *Curt. magaz.* 1731.

Jasminum 3. *Hardwicke in Asiat. research.* 6. 349: *(edit. londinen. in 8vo.)*

Frutex *majusculus v. arbuscula, sempervirens, cortice fuscescente, glabrâ:* rami, *alterni novelli virentes, erecti, flexuosi, subangulosi.* Folia *alterna, distantia, sæpiùs trijuga, nunc 2-v.-4-juga, interdùm ternata, ramorum novissima haud rarò simplicia, suprà atrovirentia et opaca, subtùs pallidiora, juniora lætiùs viridia subnitentia:* petiolus *suprà unisulcus, infrà convexus:* foliola *opposita, brevè petiolata, ovato-acuminata, terminale majus, unciale ad biunciale v. ultrà.* Cymi *subtrichotomi, erectiusculi, 6-12-flori;* pedicellis *gracilibus* bracteolâ *subulatâ rameâ basi appressâ;* floribus *odoratissimis.* Cal. *campanulatus denticulis, 5 acutis sinu lato rotundato interstinctis.* Corolla *aurea;* tubus *crassus, semuncialis v. tantillùm magis;* limbus *5-fidus æqualis tubo, patentissimus, recurvus, laciniis latis ellipticis obtusis.* Anth. *majusculæ subsessiles, mucrone præfixæ, emicantes tubo.* Stigmata 2 *clavato-clausa.*

Jasmine is of those genera, the type of which has pervaded the four quarters of the globe; but in unequal proportions. In Europe the name has become popular chiefly through the common white species, *officinale;* one not however indigenous within the geographical boundary of that quarter; in relation to which, its first appearance takes place in asiatic Georgia and Circassia. No white-flowered species belongs to Europe, where the yellow-flowered *fruticans* alone has a station; unless indeed *humile,* another of similar hue, shall prove to be european; a fact not yet ascertained, although the plant is universally known by the name of the Italian Jasmine. None of the genus approaches these islands nearer than by the south of France and Italy. The great majority of the congeners of this delightful group, has been engrossed by India. Africa has several. Only

one has been assigned to the southern division of America; to the northern not one.

Captain Hardwicke's account, in the Asiatic Researches, of his Journey to Sirinagur, the chief town of the province of that name in Tibet, is followed by an appendix containing scientific descriptions of the plants observed in the route. Among them is that of a yellow Jasmine, found by the side of a watercourse between the mountains at Adwaanee; and so depicted as to leave us no doubt of its identity with the present species; one point of whose spontaneous origin is thus determined to be in the highlands of the north-west frontier of Hindustan.

We gather from the same source that the plant forms a large bush. All those we have seen in our collections, though young, are of robust growth; and are said to be derived from one introduced about three years ago from India. *Stem,* in the largest we have seen, about the thickness of a swan-quill, with a smooth pale brown bark. It grows upright, and has as yet no appearance of requiring support, as the generality of the congeners do. The young branches are green, flexuose, and furrowed, or angular above. *Leaves* alternate, unequally pinnate, on the upper side of an opaque blackish green when old, on the under much paler, unequally trijugous, or with 3 pair of leaflets and an odd one, sometimes with 2 and 4 pairs, seldom ternate, and now and then the top ones on a branchlet are entirely uncompounded; *petiole* furrowed above, convex beneath; *leaflets* opposite, shortly petioled, ovately lanceolate, acuminate, terminal one the largest, often twice the size of the rest, and from one to two inches long or more. *Cymes* terminal (6-12)-flowered, subtrichotomous, loose. *Flowers* of a golden-yellow hue, and of the richest fragrance. *Calyx* short, cylindrically campanulate, teeth short, pointed, separated by broad shallow rounded sinuses. *Limb* 5-parted, an inch or more across, segments broad, elliptic, round pointed, recurvedly expanded, the length of the tube. *Anthers* large, nearly sessile, protruded in part from the orifice of the tube, mucronate. *Stigma* 2-parted, clavately united or with the lobes clubbed into one.

The drawing was taken in the conservatory of Messrs. Lee and Kennedy, Hammersmith.

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a The tube of the flower dissected to show the stamens. *b* The pistil with the stigmas artificially disunited. *c* A berry. *d* The calyx.

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Smith. sc.

CRINUM bracteatum.
Short-leaved Crinum.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germen inferum.
AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I. Radix bulbosa. Flores spathacei umbellati, rarò solitarii.*
CRINUM. Suprà vol. 1. *fol.* 52.

C. *bracteatum*, bulbo subcolumnari; foliis oblongo-lanceolatis obtusè acuminatis cum puncto cartilagineo, margine lævissimis, subundulatis; umbella multiflora pedunculata pallido-bracteosa; limbo tubo sublongiore; stylo breviore staminibus.

Crinum bracteatum. *Willd. sp. pl.* 2. 47. *Jacq. hort. schœnb.* 4. 7. *t.* 495.
Crinum brevifolium. *Roxburgh MSS. cum tab. pict. In the Library of the East India Company.*

Bulbus *magnus ovato-cylindraceus* 4-5-*uncialis, non verò porraceus v. productus in collum, radiculis crassis.* Folia *plurima, multifaria, patentia,* 1-*sesquipedalia, uncias* 3-5 *lata, utrinque striata, exteriora sæpiùs cartilagine tenui albâ integerrimâ abeunte in cuspidem callosam marginata, deorsùm breviter angustata atque erecta.* Scapus 8-*uncialis ad pedalem, valdè compressus, intùs planior, extùs convexior.* Umbella 10-20-*flora, conspicuè distincta* bracteis *pallidis lanceolatis tubum subsuperantibus.* Spatha 3-*uncialis.* Flores *magni, albi, odori, brevè pedunculati, uncias* 5 *in extensum superantes:* tubus *rectus, tereliusculus, obsoletè trigonus, calamum crassus;* laciniæ limbi *recurvo-stellatæ, lanceolato-lineares, subæquales, æquantes v. subsuperantes tubum,* exteriores *tertiam partem unciæ latæ, canaliculato-concavæ,* interiores *angustiores planiores.* Fil. *regulari-divergentia, ex tertiâ parte breviora limbo v. magis, supernè sanguineo-rubentia;* anth. *vibratæ, flectendæ.* Stylus *brevior staminibus, sanguineus:* stig. *punctum viride, obsoletè trilobulatum:* germ. *breve, oblongum.*

The number of the recorded species of the stately tropical group to which our plant belongs, has been nearly trebled by the late Dr. Roxburgh, during his assiduous superintendence of the botanic garden at Calcutta: while the address with which he has selected and defined the discriminating marks of congeners of such signal simplicity and sameness of configuration, in the unedited portion of his *Plantæ Coromandelæ,* would of itself constitute no mean memorial of his skill.

The plant which is the subject of this article is native of the Island of Mauritius; was first introduced into the garden at Calcutta; and from thence, by Sir Abraham Hume, into this country: but seems to have been known in the

continental collections of Europe for about twenty years past; although the place of its spontaneous abode had not been ascertained till now. It is among the smallest of the genus, but of considerable elegance, and very fragrant.

Bulb 4 or 5 inches high, of an ovately cylindrical form, but not porraceous, or elongated into a neck or above-ground-stem. *Leaves* many, multifariously divergent, from a foot to a foot and half long, from 3 to 5 inches broad, oblong or broadly lanceolate, obtusely acuminate, edged by a narrow threadlike white smooth cartilage terminating in a hard point, generally curled or waved towards the base, where they are for a short space involute and contracted. *Scape* from 8 inches to a foot high, considerably compressed, flatter on the side next the bulb than on the opposite one. *Spathe* about three inches long. *Umbel* 10-20-flowered, bracteose, or conspicuously intermingled with numerous pale lanceolate *bractes* longer than the tube of the corolla. *Flowers* white, shortly peduncled, when extended about five inches long: *tube* straight, roundish, obsoletely trigonal: *segments* of the limb recurvedly stellate, reflectent, lanceolate-linear, nearly equal, as long as or rather longer than the tube, exterior ones about the third of an inch broad, interior flatter and a little narrower. *Filaments* regularly divergent, a third shorter than the limb or more, crimson upwards; *anthers* balancing, bent. *Style* shorter than the stamens, crimson: *stigma* a green obsoletely trilobulate point: *germen* oblong, short.

The drawing was made from a plant which flowered last autumn at Wormleybury, the seat of Sir Abraham Hume, in Hertfordshire.

Like the rest of the genus, it must be kept in the bark-bed, or on the flue of the hothouse.

Not recorded in the late edition of the Hortus Kewensis.

By the side of the leaf and inflorescence we have shown an outline of the upper part of the bulb diminished.

Syd. Edwards. del. Pub. by J. Ridgway and Sons 170 Piccadilly March. 1. 1817. Smith. Sc.

HYOSCYAMUS canariensis.

Canary Henbane.

PENTANDRIA *MONOGYNIA.*

Nat. ord. SOLANEÆ. *Jussieu gen.* 124.
Div. I. Fructus capsularis.
HYOSCYAMUS. *Cal.* tubulosus 5-fidus, persistens. *Cor.* hypogyna, infundibuliformis, limbo patente obliquè 5-lobo inæquali. *Stam.* epipetala. *Stylus* unicus: *stigma* capitatum. *Caps.* supera (bilocularis) ovata, utrinque compressa et sulco exarata, apice circumscissa seu operculata. *Herbæ; folia floralia sæpè geminata; flores solitarii axillares, sæpè secundi.* Juss.

H. *canariensis,* suffrutescens? foliis inferioribus cordato-ovatis, inciso-angulatis fine integris, obtusis; floralibus ovatis ellipticisve subintegris.

Perennis? pilosus. Caulis *strictus, teres, pilis albis mollissimis divaricatis hirsutus.* Folia *laxè sparsa, divaricata, solitaria, petiolata, pilosa imprimis subtùs, pubescentiam canam viridissimè at subluridè translucentia, ex cordatis evadentia ovata, lobulis gradatìm obsolescentibus;* floralia *sæpiùs integerrima acutula, rarò gemina, quorum alterum paulò minus, subcollateraliter approximatum, nunquàm oppositum.* Racemus *terminalis, flexuoso-erectus, foliosus, remotiùs multiflorus, alternus, distichus:* flores *axillares, solitarii, erecti, singulatìm explicandi, brevissimè pedicellati.* Cal. *herbaceus, lurido-virens, tubuloso-campanulatus, molli-pilosus, segmentis 5 latis, patentibus, muticis, 4-plo brevioribus tubo.* Cor. *è minoribus, subcaduca, fugax, stramineo-lutescens fauce violaceâ, parùm inæqualis, altior latiorque calyce;* limbo *rotato-patente laciniis brevibus, obversis, transversè latioribus, summis* 2 *majoribus.* Stam. *inclusa, declinata.* Germ. *post casam corollam ex operculo suo viridissimo umbonato-rotundo in ore tubi calycini apparens.*

An unrecorded native of the Canary Islands; recently introduced by Messrs. Whitley, Brames, and Milne. The seed was a present from Dr. Schmidt, the learned naturalist, who, with more of his associates, has just fallen a victim to the fatigues of the expedition intended to explore the Niger.

We can scarcely yet venture to speak of the size the plant may acquire, nor of its duration. We believe it to be suffrutescent and perennial, and that it will never exceed a foot and a half in height. It does not seem inclined to produce many branches. The *stem* is upright, round; covered with a long dense pubescence of very soft white straight patent hair. *Leaves* of a deep lurid green, loosely scattered, divaricate, petioled, cordate and ovate,

with angular incisions at the sides, the lobules of which are shallow and broad, at the end entire and rounded, whole blade seldom more than $2\frac{1}{2}$ inches long, soft-haired, especially underneath; *floral leaves* alternate and bifarious, ovate and elliptic, generally entire, seldom two together, when one is rather smaller, and placed almost collaterally in respect to the other, never oppositely. *Raceme* terminal, upright, flexuose, alternately and distantly manyflowered, leafy, distichous or two ranked; *flowers* axillary, very shortly pedicled, solitary, upright, opening one at a time. *Calyx* of a lurid green, inferior, persistent, substantial, nearly $\frac{3}{4}$ of an inch long, tubularly campanulate, soft-haired; *lobules* 5, broad, patent, short, awnless, nettedly veined, 4 times shorter or more than the tube. *Corolla* caducous, higher and wider than the calyx, of a yellowish straw-colour, violet within the faux or throat; *limb* patent, very slightly irregular, *segments* broader than long, obverse, two uppermost larger. *Stamens* deflectent. *Germen* concealed within the tubular portion of the calyx; lid green, rounded, visible in front of the tube as the fruit advances to maturity. But we missed the opportunity of inspecting the corolla after the figure was taken, and must refer to the plate concerning that part of the flower.

The species appears to come the nearest in habit to the *pusillus* of Persia, of any we are aware of: but that is an annual, and has a pinnatifid foliage.

The drawing was made in December, at the nursery of Messrs. Whitley and Co. King's Road, Parson's Green, Fulham.

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HÆMANTHUS coarctatus.

Close-umbelled Bloodflower.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germen inferum. AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I.* Radix bulbosa. Flores spathacei, umbellati, rarò solitarii.

HÆMANTHUS. *Umbella* terminalis, multi-numerosiflora: *spatha* polyphylla erecta, sæpè colorata, rarò diphylla aut reflexa. *Cal.* 0. *Cor.* supera, erecta, regularis, æqualis, tubuloso-sexfida, *limbo* sexpartito conivente v. stellato, longiore *tubo*. *Fil.* summo tubo insita, erecta, exserta. *Stylus* setiformi-elongatus; *stig.* punctum simplex, v. 3 minuta replicata. *Bacca* globosa v. oblongiuscula, sæpè colorata, lævis, exsulca, tri-v. (abortu) bi-uniloc., loculis monospermis: *sem.* erectum, conforme loculo: *albumen* carnosum, durum.

Plantæ bulbosæ, scaposæ, perennes: bulbus *tunicatus v. sæpiùs bifariàm squamosus laminis inæqualibus, ovatus, indusio tectus v. nudus;* rhizomate *sæpè infrà extruso, rariùs composito coagmentato et bulbicipite, interdùm radiculis tuberoso-incrassatis.* Folia *pauca sæpiùs bina, bifaria, coriaceo-crassa, angusta elongata et canaliculata ad orbiculata et plana, erecta ad humistrata, rarò petiolato-vaginantia laminâ oblongâ.* Scapus *nunc* stipulis 2 *radicalibus sæpè coloratis marcescentibus immediatè stipatus.* Umbella *congesta inclusa ad laxam exsertam.* Spatha *in quibusdam haud malè corollam* TULIPÆ *refert.* Limbi *basis modò arctior* tubo *summo sexgibboso-dilatato. Ex* multifloro *vergit ad proximum* CRINUM.

H. *coarctatus,* stipulis 2 radicalibus intrafoliaceis nascentia folia simulantibus: foliolis spathæ pluribus coloratis erectis obtusissimis umbellam congestam æquantibus: foliis glaberrimis: corollâ infundibuliformi.

Hæmanthus coarctatus. *Jacq. hort. schœnb.* 1. 30. *t.* 57. *Willd. sp. pl.* 2. 25. *Hort. Kew. ed.* 2. 2. 207.

Totus glaber. Bulbus *oblongo-ovatus, squamosus magnitudine pugni, compressus; squamis v. laminis crassis, carnosis, truncatis, sordidè albentibus margine tenuissimo fuligineo marcidoque circumdatis, distichis, imbricatis.* Folia *prodeunt post scapum florentem,* 2 *v.* 3, *elongatè sublanceolata, acutula, integerrima, utrinque ad lentem punctatula, striatula, crassa, coriacea, planiuscula, tota lætè viridia et immaculata, erecta v. patula, ferè pedalia. Sæpè ad latus scapi alia folia simul prodeunt, parva et subrubentia, quæ verò ultrà non prolongantur, sed sic perstant, tandèm marcescentia.* Scapus *antè foliâ, valdè compressus, erectiusculus, ad foliâ lateralis, viridis cum punctis sanguineis,* 8 *v.* 9 *uncias longus.* Involucri *magni foliola ferè* 6-(8) *oblonga obtusa parumpèr concava, integerrima, erecta, sordidè sanguinea (venosa), latitudine et situ inæqualia, biuncialia.* Flores *numerosi, erecti, pedicellati, longitudine involucri.* Germen *oblongum.* Cor. *infernè albida, supernè pallidè miniata:* tubus *brevissimus, supernè parumpèr (sexgibbus) ampliatus:* (limbi *basi constricti) laciniæ lineares, obtusæ, supernè concavæ, erectæ, æquales unciales.* Fil. *subulata, erecta, corollæ concolora, eâdemque ad unam tertiam longiora:* anth. *flavæ.* Stylus *erectus longit. et colore filam:* stig. *obtusum flavescens.* Jacquin l. c.

Hæmanthus, as at present defined, has no spontaneous species without the continent of Africa; and there only within or near the tropics. Its nearest kindred in the corresponding climates of Asia and America are comprized under Crinum. In Europe one or two yellow species of Amaryllis are its nearest relatives in that quarter of the world.

Hæmanthus *dubius* of Humboldt and Bonpland is an evident anomaly in the group; and a plant we suspect not reducible to any established genus, without complicating the character of the same, so as to perplex more than an additional new name will encumber. We believe it to be a congener of the Crinum *urceolatum* of the Flora Peruviana, another heterogeneously assorted species.

Coarctatus was introduced from the Cape of Good Hope by Mr. Masson, in 1795.

Bulb oblong-ovate, compressed, bifariously tunicated, laminas in two opposite compactly imbricated series, broad, fleshy, truncated, outermost shortest. *Leaves* 2-3, posterior to the inflorescence, broadly lorate, wide pointed, smooth-edged, spotless, nearly flat, divergent, a foot or more in length. *Stipules* 2, radical, one on each side next the scape, broad as the foliage but very short, party-coloured, having the appearance of nascent leaves, but are membranous, and decay without elongating. *Scape* much compressed, green, thickly speckled with crimson dots, 6-9 inches high. *Leaflets* of the *spathe* 6-8, large, upright, of a dark orange-scarlet colour, oblong, of unequal breadth, veined, obtuse, even with the numerous-flowered pedicled crowded *umbel. Corolla* narrow-funnelform, white below, pale vermilion above; *tube* short, dilated upwards with six small protuberant corners; base of the *limb* contracted and narrower than the mouth of the tube; *segments* linear, turbinately connivent, obtuse, concave at the upper part, equal, nearly an inch long. *Filaments* subulate, upright, of the same colour as the border or limb, which they overtop by the distance of about one third of their whole length. *Style* upright, equal to the stamens, and of the same colour: *stigma* obtuse.

The drawing was taken last autumn from a plant in Mr. Griffin's conservatory at South Lambeth. By no means common in our collections. Does not require any peculiar care, and will thrive in a greenhouse.

Smith sc

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CUPHEA procumbens.

Procumbent Cuphea.

DODECANDRIA *MONOGYNIA.*

Nat. ord. Salicariæ. *Jussieu gen.* 330.
Div. I. Flores polypetali.

CUPHEA. *Cal.* tubulosus 12-striatus 6-(12-*Brown.*) dentatus dente superiore latiore; (basi hinc gibbosus. *Brown in Hort. Kew.*) *Pet.* 6, inæqualia summo calyci inserta et ejusdem divisuris alterna, 2 superiora majora. *Stam.* insertione inæqualia, nempè hinc 8 co-ordinata et conformia, indè 4 minora gemino ordine disposita quorum 2 superiora villosa; *anth.* subrotundæ. *Caps.* oblonga 1-loc., calyce tecta, cum ipso simul hinc fissa et tunc cymbiformis; *recept.* centrale è mediâ per rimam erumpens flexum, circitèr 5-spermum *seminibus* lentiformibus quasì spicato-secundis. *Herba undique viscosissima,* folia *opposita axillis inferioribus sæpiùs alternè ramiferis, superioribus subunifloris.* Juss. gen. 332.

C. *procumbens,* caule herbaceo, ramis procumbentibus viscosis, foliis ovato-lanceolatis subhispidis breviter petiolatis. *Cavan. ic.* 4. 55. *t.* 380.
Cuphea procumbens. *Persoon syn.* 2. 6.

Herba annua pubescenti-viscidus. Caulis *procumbenti-assurgens, pilis glanduliferis purpureis hirto-viscidus, pedalis et ultrà, ramosus;* rami *axillares, inferni, alterni, simplices rotundatè 4-goni, ascendentes.* Folia *teneriuscula, opposita, patentia, ovato-lanceolata, albo-pilosiuscula, nervosa, rachide subtùs varicosâ, sesqui-ad triunquialia, decrescentia ad bracteacea minima, superna crebriora;* petiolus *brevis, hirsutus.* Flores *caulem ramosque racemoso-terminantes, alterni, interfoliacei, solitarii, nutantes, irregulares, per transversam corollam subunciales;* pedicellus *longior petiolis, 2-3-plo brevior calyce.* Cal. *persistens, violaceo-striatus, ut caulis pubescens, hinc ventricosus, basi superiore subcalcarato-productâ, fauce dilatatâ ore subbilabiato, labio* summo *viridi productiore recurvo bipetalifero,* imo *4-petalifero minore;* dentes 6 *callosi apice setifero.* Pet. *bilabiato-rotata, distantia, roseo-purpurascentia, tenera, fugacia, obovato-spathulata, calyce breviora, undulato-rugosa, ungue brevi angusto, laminâ subrotundâ; superioris labii 2 majora.* Fil. *inclusa pilosa apice inflexa ordine gemino fauci calycis inserta, 5 alterna breviora, suprema 2 sub antherâ lanâ densâ barbata.* Stylus *inclusus albus subulato-setaceus, subglaber pilis paucis vagis, supra incurvus persistens, germinis membranacei albi acuti continuus:* stig. *subcapitellatum.*

A species of a genus belonging to the same natural order, in Jussieu's arrangement, as the indian Grislea *tomentosa* of the 30th article of this work, and as the common Purple Loosestrife (Lythrum *Salicaria)* found at the side of our own rivers. Native of Mexico, and very lately introduced from the Berlin botanic garden, from whence it was

received both by Mr. W. Anderson, of the Apothecaries' botanical establishment, and Messrs. Whitley and Co.

On referring to the Banksian Herbarium, from which the CUPHEA *lanceolata* of the late edition of the Hortus Kewensis was adopted; we are led to suspect that that plant, though very near, is distinct as a species from this. Its stem is entirely upright, much slenderer, and the pubescence white; a flower situated near one of the branches has a peduncle even longer than the calyx, all are upright, and the plant is upon a smaller scale throughout. But still the specimen is too shattered and imperfect for a safe decision, and may have been one of feeble growth, and the direction of its stem and flowers may have been altered by the mode of drying the plant. Yet we are inclined to believe it essentially distinct. Be that as it may, the appellation of *procumbens* should certainly be maintained on the score of priority, whether the plants should prove ultimately of one species or not.

The present is an annual. First raised in Europe by Professor Cavanilles, in the garden of the Buen Retiro at Madrid. In part procumbent, in part ascendent; *stem* herbaceous viscidly and roughly pubescent, with purple hairs, a foot or more long, branched; branches axillary, low down, alternate, simple, bluntly 4-cornered. *Leaves* opposite, patent, ovately lanceolate, slightly pubescent with white hairs, nerved, rachis or midrib varicose beneath, from an inch and a half to near three inches long, diminishing as they advance towards the summit of the stem to mere bractes: *petiole* short, hirsute. *Flowers* numerous, loose, terminating stem and branches in leafy racemes, alternate, solitary, interfoliaceous or lateral between each pair of leaves, nutant, irregular, about an inch across the corolla: *peduncles* longer than the petioles, two or three times shorter than the calyx. *Calyx* purplish, tubular, with 12 raised streaks and a pubescence the same as that of the stem, ventricose beneath, upper side of the base projecting like a short obtuse spur, faux widened, orifice slightly bilabiate, patent, upper lip largest bearing 2 petals, lower smaller bearing 4 petals; lobules or teeth 6, callous, thickened, pointed by a terminal bristle. *Petals* inserted within the rim of the orifice of the calyx, and alternating with the teeth, rose-purple, bilabiately rotate, with open intervals;

fugacious, tender, obovately spatulate, undulate, shorter than calyx, upper two largest. *Filaments* enclosed, hairy, inserted in two alternating series in the faux of the calyx, five shorter than the rest, uppermost two-bearded, with dense purplish wool close under the anther. *Style* white, enclosed, subulately lengthened, nearly smooth, with a few downy hairs scattered above the middle, curved at the top, persistent, continuous with the thin membranous white tapered *germen: stigma* subcapitate.

The drawing was taken late in the autumn at the nursery of Messrs. Whitley, Brames, and Milne, at Parson's Green, where it was kept in the greenhouse.

a A flower dissected vertically, showing the insertion of the petals into the calyx, and that of the stamens. *b* The pistil.

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ASTER novæ angliæ.

New England Star-wort.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Corymbiferæ. *Jussieu gen.* 177.

Div. II. Receptaculum nudum. Semen papposum. Flores radiati; (*in* Tussilagine *et* Senecione *flores partìm flosculosi.*)

ASTER. *Flores* radiati, ligulis pluribus quàm 10, lanceolatis. Cal. imbricatus, squamis inferioribus patulis. *Pappus* pilosus. *Flores paniculati aut corymbosi; ligulæ violaceæ aut purpurascentes aut albidæ. Species paucissimæ fruticulosæ. A.* alpini *caulis simplex uniflorus.* Juss. gen. 181.

Div. Herbacei foliis linearibus lanceolatisve integerrimis.

A. novæ angliæ, foliis lanceolatis integerrimis cordatis amplexicaulibus pilosis, calycibus discum superantibus laxis, foliolis lineari-lanceolatis subæqualibus, caule hispido. *Hort. Kew.* 3. 201.

Aster novæ angliæ. *Linn. sp. pl.* 2. 1229. *Mill. dict. ed.* 8. *n.* 5. *Hort. Kew. ed.* 2. 5. 55. *Michaux bor. amer.* 2. 113. *Willd. sp. pl.* 3. 2032.

Aster foliis lanceolato-linearibus alternis integerrimis semi-amplexicaulibus, floribus capitato-terminatricibus. *Gron. virg. ed.* 2. 124. *Clayt. n.* 244.

Aster novæ angliæ altissimus hirsutus, floribus amplis purpureo-violaceis. *Herm. paradis.* 98. *cum tab.*

Asteripholis. *Ponted. diss.* 244.

Perennis. Orgyalis v. ultrà. Caules *hispidi fusco-rubescentes, stricti, supernè flexuosi laxiùs atque latiusculè paniculati, ramis simplicibus, summis subcorymboso-fastigiantibus.* Folia *erectiuscula, profundè cordato-amplexicaulia, lineari-lanceolata, angusta, triuncialia v. longiora, decrescentia, hispidulè villosa.* Flores *in ramorum finibus capitato-corymbulosi,* 1-5, *majusculi,* pedunculis *brevissimis.* Cal. *campanulatus; foliolis pauciseriatis, subcoloratis viridibusve, lanceolato-linearibus, longè acuminatis, villosis, subsuperantibus discum floris.* Radius *cyaneus vel purpureo-rubens.* Flosculi disci *flavescentes, limbo brevi fusco-purpureo, dentibus* 5 *ovato-acuminatis.* Anth. *inclusæ.* Stigmata 2, *replicata, linearia, lutea.* Germen *albo-sericeum, oblongum,* pappo *fulvescente.*

Of about one hundred species of Aster which have been enumerated by Willdenow, upwards of sixty belong to North America. Mr. Pursh has since increased that number to seventy-eight in his North American Flora.

The present species is said to be found from Canada to Virginia. Our plant is evidently, even to the variety, the same with that of the Flora Virginica; a fact we have established by comparison with the prototype specimen in Clayton's Herbarium. We doubt, however, whether it is that intended by Pursh, since we did not find it to be the

same with the one he has referred to in Mr. Lambert's Herbarium.

We have seen no figure of this gay flower in any work, except the diminished uncoloured engraving in the dutch publication we have cited above. Yet the species has continued very generally to enliven our collections, at the close of each succeeding year, from that of 1710 to the present.

A perfectly hardy perennial, thriving in almost any situation. *Stem* from seven to eight feet high, upright, brownish red, hispid, flexuose above and divided into a loose broad fastigiant panicle of simple flowerbearing branches. *Leaves* cordately stemclasping, linear-lanceolate, narrow, three inches or more in length, gradually diminishing, subhispidly villous; lobes at the base deep. *Flowers* largish, disposed at the end of the branches in few-flowered close corymbs; *peduncles* very short. *Calyx* campanulate; *leaflets* in few ranks, green or party-coloured, lanceolately linear, pointed, villous, equal to, or higher than the disk of the flower. *Ray* varying from deep blue to purplish red. *Florets* of the *disk* yellowish, with a short brown-purple limb; *segments* ovate, pointed. *Anthers* enclosed. *Stigmas* 2, yellow, linear, divergent. *Germen* silky, oblong: hair of the *pappus* or crown inclined to tawny.

The drawing was made in November last, at Messrs. Whitley, Brames, and Milne's, in the King's Road, Parson's Green, Fulham.

a A floret of the disk. *b* A floret of the ray. *c* The calyx, with the enclosed receptacle deprived of all the florets, and dissected vertically.

Syd. Edwards del.   Pub. by J. Ridgway & Sons 170 Piccadilly March 1 1817   Smith sculp.

SELAGO fasciculata.

Cluster-flowered Selago.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. Viticeæ. *Jussieu gen.* 106.
Div. III. Genera Viticibus affinia.

SELAGO. *Cal.* tubulosus 4-(5-) fidus inæqualis. *Cor.* tubo brevi aut filiformi longiori, limbo 3-5-fido æquali aut inæquali. *Stylus* 1; *stigma* 1. *Semen* 1-2, calyce tectum. *Herbæ aut suffrutices; folia alterna; flores in plurimis* Eranthemo *et* Verbenæ *affines, irregulares tubulosi 1-2-spermi, alternè spicati terminales, spica simplici aut multiplici; in paucis regulares tubo brevi 2-spermi subcorymbosi terminales, forsàn è genere et ordine depellendi.* Jussieu l. c. 110.

S. *fasciculata*, corymbo multiplici, foliis obovatis glabris serratis. *Lin. Mant.* 250.

Selago fasciculata. *Lin. syst. veg. ed.* 14. 568. *Willd. sp. pl.* 3. 183. *Jacq. ic. rar.* 3. *t.* 496. *coll.* 3. 246. *Hort. Kew.* 2. 355. *ed.* 2. 3. 432.

Caules *ascendentes v. erectiusculi, sesquipedales, fruticosi, teretes, (opposito-) ramosi, infernè lignosi et fusci, calamum et ultrà crassi.* Folia *conferta* (nunc laxa) *ramos* (virentes) *totos obsidentia,* (sparsa) *alterna, vix uncialia* (¾ partes unciæ longa supernè versùs decrescentia in bracteas) *obversè ovata* (deorsùm subpetiolatìm attenuata) *acutè* (inciso-dentata) *serrata, rigidula, crassula* (coriacea), *modicè decurrentia, ad basin integerrima, lætè virentia, utrinque glabra, subamaricantia.* Corymbi (ex spiculis infernè foliolosis suprà densè floriferis in foliis supremis bracteaceo-diminutis axillaribus undique sparsis approximatis fastigiantibus compositi) *terminales, fasciculati, densi, convexuli, omnes simul unam alteramve unciam diametro æquantes.* Bracteæ (singulares) *ad singulos flores lanceolatæ, acutæ, concavæ, calycem amplexantes, eoque duplo longiores, virentes.* Flores *fortitèr et gratè olentes, calyce pallido, corolla pallidè cærulea, germine viridi, filamentis styloque albis, antheris sulphureis.* Cal. *profundè 5-sectus, persistens: segmentis linearibus, obtusulis, concavis, erectis, æqualibus.* Cor. 1-*petala:* tubus *angustè infundibuliformis, parùm incurvus, calyce ferè duplo longior.* Limbus *5-fidus, patentissimus, tubo duplo brevior: laciniis oblongis, obtusis, planis: 2 inferioribus brevioribus minùsque profundè sectis, constituentibus veluti labium superius corollæ inversæ.* Fil. *capillaria, tubo corollæ innata: 2 exteriora longiora corollam æquant.* Anth. *oblongæ* (capitatæ, apice dilatato filamenti adnato-incumbentes) *transversè accretæ apice dilatato filamenti.* Germ. *obversè ovatum, compressum obtusum.* Stylus *filiformis, erectus, staminibus longior.* Stig. *simplex obtusum.* Jacq. nonnullis ex nobis additis.

A dwarf shrub; native of the Cape of Good Hope, from whence it was introduced in 1774 by the late Mr. Masson.

Stem ascendent or nearly upright, round, about a foot and half high, woody and brown-barked below, of the thickness of a common pen or thicker. *Leaves* closely, or

sometimes loosely scattered round the whole of the green branches, scarcely an inch in length, diminishing as they ascend to the form of bractes, obversely ovate, tapered towards their base into a kind of petiole, deeply and widely serrate, with pointed teeth, of a thick leathery substance and stiff, slightly decurrent, entire or unindented at the sides below, bright green, entirely smooth, of a bitterish taste. *Corymbs* compound, terminal, crowdedly fasciculate, convex, from one to two inches over, composed of fastigiant closely scattered corymbules leafy downwards, thickly flowered upwards and axillary in the uppermost diminutive leaves. *Bractes* single, one below each flower, lanceolate, pointed, concave, embracing the calyx and nearly twice its length, green. *Flowers* small, of a highly scented fragrance, calyx pale, corolla pale blue, germen green, filaments and style white, anthers sulphur-coloured. *Calyx* deeply five-cleft, persistent; segments linear, rather obtuse, concave, upright, equal. *Corolla* monopetalous or of one piece; *tube* narrow-funnelform, slightly curved, nearly twice as high as the calyx: *limb* or border five-cleft, spread out, twice shorter than the tube; *segments* oblong, obtuse, flat, two lower ones shorter and less deeply parted, forming the kind of upper lip to the resupinate corolla. *Filaments* capillary inserted in the tube, two exterior equal to the border of the corolla. *Anthers* oblong, capitate, incumbent, adnate to the enlarged apex of the filament. *Germen* obovate, compressed, obtuse. *Style* filiform, upright, longer than the stamens. *Stigma* simple, obtuse.

A hardy greenhouse plant, requiring nearly the treatment of a Cape Heath, and to be planted in a mixture of black peat-mould and hazel-loam. Blossoms in the autumn. The drawing was taken at the nursery of Messrs. Lee and Kennedy at Hammersmith. By no means a common plant. We have trusted in a great degree to Jacquin in our description, having missed the opportunity of inspecting the inflorescence until it was too far gone for our purpose.

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a Calyx, with the pistil as it appears when the corolla is removed. *b* The corolla dissected vertically.

18.

Syd. Edwards del.

Pub.d by Ridgways, 170, Piccadilly, April 1, 1817

Watts Sc Brownlow St.

STERCULIA Balanghas
Crown-flowered Sterculia.

MONŒCIA *MONADELPHIA*. *Hort. Kew.*

Dodecandria Monogynia. Willd.

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. VI.*
STERCULIACEÆ. *Ventenat malmais.* 91.

STERCULIA. *Cal.* coriaceus, quandoque tubulosus, 5-dentatus, sæpiùs campanulatus, 5-fidus v. 5-partitus; laciniis v. stellatìm patentibus v. arcuatìm introflexis. *Stipes* centralis productus in urceolum 5-dentatum dentibus 2-3-antheriferis. *Germ.* 5-striatum intra urceolum insidens. *Stylus* 1, germine incumbens. *Stig.* sub5lobum. *Capss.* 5 (aut pauciores quibusdam abortivis) coriaceæ, uniloc., mono-polyspermæ, (gelatinâ per rimam exsudante tumentes *Juss.*), suturâ interiore dehiscentes marginibus seminiferis. *Embryo albumine* carnoso et bipartibili cinctum ut in plerisque SAPOTIS. *Cotyledones* irregulares crassissimæ, v. tenues. *Radicula* ascendens v. umbilico opposita.

Arbores. Folia *alterna, simplicia, aut digitata;* petioli *sub apice articulati.* Stipes *quandoque solo germine, quandoque germine v. staminibus orbatus.* Ventenat loc. cit.

S. *Balanghas,* foliis ovatis integerrimis alternis petiolatis, floribus paniculatis. *Linn. sp. pl.* 2. 1430.
Sterculia Balanghas. *Cavan. diss.* 5. 286. *t.* 143. *Willd. sp. pl.* 2. 872. *Hort. Kew. ed.* 2. 5. 338.
Southwellia nobilis. *Salisb. parad. lond.* 69.
Nux malabarica sulcata mucilaginosa fabacea. *Pluk. alm.* 266.
Cavalam. *Rheede mal.* 1. 81. *tab.* 49.

Arbor *excelsus diametro bi-tripedali.* Folia *membranacea, sparsa, reflexa, ovali-v. obverso-oblonga, nitidè virentia, sesuncialia ad pedalia, triplo ferè angustiora quàm longa, rachide subtùs varicosâ nervis lateralibus alternis distantibus et pilis vagis stellatis parce conspersis acumine abrupto obliquato:* petioli *teretes utroque fine incrassati:* stipulæ *parvulæ rameæ caducæ pubescentes, subulatæ.* Racemi *elongato-flexiles ramorum parte terminali surculosâ aphyllâ fusco-et stellato-pubescente è propriis gemmis paniculatìm circumnati, plurimi, diffusiùs divaricati, compositi, laxè multiflori, flexuosi, fusco-villosi,* pedunculis *partialibus distantibus pluri-unifloris,* pedicellis, *propriis filiformibus divaricatis supra medium articulatis:* bracteæ *minimæ.* Flores *in extensum vix semunciam transversi, sordidè chloroleuci externè subfusco-villosi.* Calyx *turbinato-campanulatus;* limbus *5-partitus, tubo longior, ex radiato arcuatìm connivens, laciniis distantibus lineari-lanceolatis lateribus reflexis, post anthesin invicèm recedentibus.* Cor. 0. Stipes fructificationis *longitudine ferè dimidii calycis, teres, glaber, erectus, apice dilatatus.* Fil. 0. Anth. *luteæ summi stipitis margine circumpositæ, loculis didymis.* Germ. *ruberrimum, hirsutum, tri-quinquelobo-globosum.* Stylus *stipitis concolor versùs antheras secundùm latus germinis reflexus:* stigma *pileato-capitatum, rotundè tri-quinquelobum.*

Native of the East Indies, where it grows in rocky and sandy tracts to a large tree, the trunk of which is sometimes from two to three feet in diameter.

The drawing was made last summer from the first of the species cultivated here; still in the hothouse of Sir Abraham Hume at Wormleybury, in Hertfordshire; where it had been introduced by Lady Amelia Hume in 1787.

Willdenow, viewing the column in both the sterile and the fertile flowers as an integral and independent member, has ranked the genus in the class DODECANDRIA. In the Hortus Kewensis, after Linnæus, the genus stands in MONŒCIA MONADELPHIA, the column, when from the failure of the germen it supports only anthers, being designated as the monadelphous union of the filaments of the stamens, and, by a whimsical and arbitrary conversion of terms, when it supports the perfect germen as well as anthers, as the independent and common pediment of both organs. Its true place seems to us to be in MONŒCIA POLYANDRIA.

Leaves membranous, scattered, reflectent, ovally or obversely oblong, bright green, from six inches to a foot in length, nearly three times longer than broad, terminated by an abrupt slanted point, midrib prominent beneath nerves lateral alternate distant studded underneath with composite stellate hairs: *petioles* round thickened at both ends: *stipules* growing on the branch, small, subulate, pubescent, caducous. *Racemes* long, flexile, growing from their proper buds in a panicle round the terminal leafless brown and stellately pubescent shoots of the branches, many, diffusely divaricate, composite, loosely many-flowered, flexuose, brownly villous; *partial peduncles* distant, from one to several flowered; *proper pedicles* filiform, divaricate, jointed above the middle: *bractes* minute. *Flowers*, when extended, scarcely half an inch across, of a dull yellowish or greenish white, externally brownly pubescent. *Calyx* turbinately campanulate; *limb* 5-parted, longer than the tube, segments converging archwise and united at their points with open intervals, lanceolately linear with reflectent sides. *Column* half the length of the calyx, round, smooth, upright, dilated at top. *Anthers* didymous, placed round the rim of the apex of the column. *Germen* scarlet, hirsute, 3-5-lobed, globular: *style* bending downwards along the side of the germen, that the stigma may reach the anthers: *stigma* 3-5-lobed, rounded.

* The column bearing the germen and anthers.

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PITTOSPORUM revolutum.

Yellow Pittosporum.

PENTANDRIA *MONOGYNIA.*

Nat. ord. PITTOSPOREÆ. *Brown in append. to Flinders's voy.* 2. 542.

PITTOSPORUM. *Cal.* pentaphyllus, inferus, deciduus, foliolis subæqualibus. *Cor.* pentapetala, petalis infernè in tubum cohærentibus, supernè acutis recurvis. *Stam.* hypogyna, cum petalis alternantia; inclusa. *Germ.* superum: *stylus* unicus: *stig.* subcapitatum. *Caps.* 1-loc., stylo umbilicata, bi-aut trivalvis, polysperma; valvulis medio septiferis: *sem.* angulata septo inserta, duplici serie superposita: *embryo* minutus, propè umbilicum, inclusus *albumine* carnoso. *Frutices v. arbores, inordinatè ramosi, folia alterna, brevi petiolata, exstipulata, integerrima; flores terminales, axillaresve, subracemosi, bracteati.* Bonpland loc. infrà cit. 56.

P. *revolutum,* foliis ellipticis obtusiusculis subtùs pubescentibus margine revoluto. *Dryander in Hort. Kew. ed.* 2. 2. 27.

Pittosporum tomentosum. *Bonpland nav. & malmais.* 1. 57. *t.* 21.

Pittosporum flavum. *Rudge in trans. linn. soc.* 10. 298; *cum icone ad siccum delineatâ.*

Frutex *erectus, caulescens, sparsè ramosus;* rami *teretes, infernè versùs nudiusculi v. foliis paucis vagis, in surculis novellissimis ferrugineo-tomentosi, crebriùsque foliati.* Folia *sparsa, obversè ovali-oblonga acumine ab abrupto brevique variè producto, deorsùm longè attenuata, subtùs lunuginosa vel potius tomentosa in junioribus tomento denso ferrugineo, tri-quadriuncialia, latitudine unciali v. sesquiunciali, suprà glabra, saturatè virentia, margine brevi reflexo cincta.* Flores *pallido-flavi, nutantèr et simplicitèr racemosi terminales:* pedunculo *recurvo tereti subviscoso-tomentoso, ferrugineo, uni-biuncialis v. ultrà, supernè florifero,* pedicellis *plùs minùs fastigiantibus, nunc quasi umbellatis, bracteatis,* bracteis *foliolis calycinis similibus, apice reflexis.* Cal. *patens, pallidè virens, extùs viscoso-villosus, corollâ ⅓ brevior;* foliolis *lanceolatis, parùm inæqualibus, intùs glabris.* Tubus corollæ *triplo longior limbo, pallidus, cylindricus, subventricosus, suturis 5 ubi cohærent ungues petalorum striatus, intùs viscosus;* laminæ limbi *flavæ, læves, oblongæ, obtusæ, primò patentes, indè revolutæ.* Fil. *alba, longitudine tubi.* Anth. *furvo-fulvæ, ex apice emicantes, sagittato-oblongæ, dorso longè supra basin appensæ, introversæ, rimâ laterali utrinque dehiscentes:* pollen *flavum.* Germ. *oblongum densè ferrugineo-hirsutum, biloculare, succo resinoso scatens,* ovulis *numerosis:* stylus *teres, strictus, duplo brevior germine, virens:* stig. *pileato-v. depresso-capitatum.*

Pittosporeæ is the name of a natural order defined by Mr. Brown, in a treatise on the vegetation of Terra Australis, which forms the Appendix to the Voyage of Captain Flinders. In this valuable tract, besides the illustration of the characters of the so termed natural orders or families of vegetables, a laborious and judicious attention

has been devoted to mark out their geographical distribution; a subject interesting as a part of their history, and important as the probable means of arriving at the knowledge of the general law which regulates that distribution. In justice to our readers, we shall extract the paragraph which relates to the group comprising the subject of the present article.

"Authors have generally been disposed to consider PITTOSPORUM, BURSARIA, and BILLARDIERA, as belonging to "*Rhamneæ* or *Celastrinæ*, from both of which they are "certainly widely different; and they appear to me to "constitute, along with some Australian genera, a very "distinct natural family. *Pittosporeæ* form a small tribe, "chiefly belonging to Terra Australis, where most of them "have been observed in the principal parallel; but certain "species of all the published genera exist at the south end "of Van Diemen's Island, and both PITTOSPORUM and "BURSARIA are found within the tropic. PITTOSPORUM, the "only genus of the order which is not confined to Terra "Australis, has the most extensive range in that country, "and has been found in many other parts of the world, "namely, New Zealand, Norfolk Island, the Society and "Sandwich Islands, the Moluccas, in China, Japan, and "even Madeira. It has not, however, been observed in "any part of America."

The present species is native of New South Wales, and was introduced by Sir Joseph Banks; and altho' present in our gardens in 1795, has been figured by Mr. Rudge in 1811, from a dried stick, as the substitute of an erroneously supposed absentee.

An upright shrub, about three or four feet high, scatteredly branched; branches round, nearly leafless downwards, leafy at the new shoots, where they are covered with a tomentose russet nap. *Leaves* scattered, obversely and ovally oblong, with a variously tapered point, sometimes abrupt and short, sometimes equably extended, all farther tapered towards the base, three or four inches long, an inch or an inch and half broad, above smooth and green; underneath, when full grown, grey and downy, when young, tomentose and russet coloured, edge shallowly reflectent. *Flowers* palish yellow, terminal, in a simple nodding raceme, sometimes scarcely extending beyond an umbel-like corymb; *peduncle* round russet-coloured subviscidly tomentose, from one to two inches long or more,

without flowers below; *pedicles* variously fastigiant; *bractes* nearly of the same nature as the leaflets of the calyx, recurved at the top. *Calyx* pale green, patent, viscously villous without, a third shorter than the corolla; *leaflets* lanceolate, slightly unequal. Tube of the *corolla* three times longer than the laminas of the petals, pale, cylindric, slightly ventricose, with five sutures marking the cohesions of the ungues that constitute it; viscous within; *laminas* of the *limb* deeper yellow, smooth, oblong, obtuse, first patent, then revolute. *Filaments* white, the length of the tube: *anthers* of a dusky tawny colour, peering from the tube, sagittately oblong, appended by the back considerably above their base, fronting inwards, bursting along the sides: *pollen* yellow. *Germen* oblong, shaggy, russet-coloured, bilocular, filled with resinous lymph: *ovules* numerous: *style* green, round, straight, twice as short as the germen: *stigma* capitate, rather flattened.

A greenhouse plant, flowering from March to August. The drawing was made at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Parson's Green, Fulham.

a A flower dissected, showing the insertion of the stamens. *b* The pistil.

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DONIA glutinosa.

Limy-leaved Donia.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Corymbiferæ. *Jussieu gen.* 177.

Div. II. Receptaculum nudum. Semen papposum. Flores radiati; (in *Tussilagine* et *Senecione* partìm flosculosi.)

DONIA. Recept. nudum. *Pappus* setaceus, caducus. *Calyx* imbricatus, hemisphæricus. *Brown in Hort. Kew. ed.* 2. 5. 82.

D. *glutinosa*, frutescens; foliis oblongo-obcuneatis sessilibus serratis, calycinis squamis linearibus erectis. *Pursh amer. sept.* 2. 559; *(in obs. ad* Doniam squarrosam).

Donia glutinosa. *Brown in Hort. Kew. ed.* 2. 5. 82.

Doronicum glutinosum. *Willd. sp. pl.* 3. 2115.

Aster glutinosus. *Cavan. ic.* 2. 52. *t.* 168. *Desfontaines in ann. du muséum.* 2. 34.

Suffrutex *sempervirens erectus glabro-viscosus erectissimè ramosus, bi-tripedalis;* caulis *teres, pallidus;* rami *albidi, angulati, flexuosi, uniflori, foliosi.* Folia *distantia, sparsa, erecto-patentia, obovato-oblonga, mucronato-acuta, reticulato-venosa viscoso-porosa, margine serrulato-scabra, acutè dentata vel nunc dentibùs nonnullis acutis tantummodò versùs apicem incisa, amplexicaulia, trinervi-decurrentia, lobulis 2 baseos ex eorum margine interiori longè infra rachidem folii adnatis ramo;* floralia *pauca (subtrina), subdifformia, ovato-v. oblongo-lanceolata.* Flores *lutei, terminales, subsessiles, solitarii.* Cal. *plurimo ordine polyphyllus, herbaceus, squarroso-imbricatus, visco copioso obductus;* foliola *basi arctè appressa, lanceolato-linearia, extùs convexiuscula, inferiora mucronata angustiora recurvo-divaricata, superiora erectiora patula, suprema membranosa, albicantia, appressa.* Radius *uniseriatus, multiflosculosus, duplo longior calyce,* flosculis *longè tubulosis, apice bidenticulato-emarginatis, biplicatis;* germ. *turbinato-oblongum quinerve, angulosum;* pappus *sessilis aristaceus, plumosus paucus, inæqualis, incurvulus;* stigmata *linearia, exserta tubo.* Discus flosculis *luteo-pallentibus, æqualibus calyci, glabris, dentibus erectis acutis:* anth. *inclusæ, polline flavo:* stigmata 2 *linearia tota exserta:* germ. *radii simile.* Receptaculum *planum, foveolatum, foveolarum marginibus dentato-scabratum.*

A genus instituted by Mr. Brown, in the late edition of the Hortus Kewensis. The character principally relied upon for technical distinction, is a bristly caducous seed-crown or pappus.

The present species is native of Mexico, and was first introduced by Mr. Aylmer Bourke Lambert in 1803. We have another *(squarrosus)* in our collections, which comes from the banks of the Missouri.

A suffrutescent evergreen, 2-3 feet high, upright, smooth, viscous, with a round branching pale brown stem; branches remarkably upright and straight, white, angular, flexuose, leafy, one-flowered. *Leaves* far apart, scattered, upright, patent, obovately oblong, mucronately pointed, reticulately veined, porously viscid, serrulately roughed at the edge, and generally indented at the upper portion by several sharp pointed teeth, sometimes round the whole edge, stemclasping, decurrent by three nerves, the two lobules at the base growing by the inner edge to the stem, considerably farther down than where the midrib is attached: *floral ones* about three, of a rather different form, ovate or oblong-lanceolate. *Flowers* bright yellow, terminal, nearly sessile, solitary. *Calyx* of numerous leaflets in several ranks, herbaceous, squarrosely imbricated, suffused more copiously with viscous secretion than any other part of the plant; *leaflets* close at the base, lanceolately linear, externally a little convex, lower ones mucronate narrower spreading and recurved, upper upright slightly patent, innermost membranous, whitish, applied closely to the flower. *Ray* of one rank, with many *florets*, twice as long as the calyx; tube of the florets long, lamina or blade with a double plait, indented at the end with two minute teeth: *germen* turbinately oblong, five-nerved, angular: *pappus* sessile, awnlike, feathered, of few pieces, unequal, slightly incurved: *stigmas* 2, linear, protruded above the tube. *Disk* with very pale yellow *florets*, equal to the calyx, smooth, with small upright pointed teeth: *anthers* enclosed; *pollen* yellow: *stigmas* two, linear, extruded their whole length: *germen* like that of the ray. *Receptacle* flat, pitted, roughened over by the dentately extended margins of the small excavations or pits in which the germens stand.

The drawing was taken in February at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Parson's Green, Fulham. Cultivated in the greenhouse, and is in flower most part of the year. Requires no particular attention in the culture of it.

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a A floret of the disk. *b* A floret of the ray. *c* The calyx dissected vertically, showing the naked receptacle of the flower.

Syd. Edwards. del

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Smith Sc

PASSIFLORA angustifolia.

Narrow-leaved Passionflower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in annales du muséum.* 6. 102.
PASSIFLORA. *Suprà vol.* 1. *fol.* 13.

P. *angustifolia,* foliis inferioribus trilobis acuminatis, superioribus indivisis lanceolatis, petiolis biglandulosis, floribus apetalis. *Willd. sp. pl.* 3, 616.

P. angustifolia. *Swartz prod.* 97. *Fl. ind. occid.* 2. 1133. *Hort. Kew. ed.* 2. 4. 151.

P. heterophylla. *Hort. Kew.* 3. 309. *Jacq. hort. Schœnb.* 2. 28. *t.* 181. *Miss Lawr. passionfl.*

P. longifolia. *Lamarck encyc.* 3. 39. *Cavan. diss.* 10. 446. *t.* 270.

Caules *plures, fruticosi, teretes, glabri, graciles,* 4*-pedales et ultrà, ramosi, ætate suberosi et cinerei, cirris simplicibus longisque scandentes.* Folia *infima ex subrotundo-ovata obtusa et vix uncialia; dein unum aliudve duplo majus, acutum, et in unico aut in utroque latere in lobum excisum. Reliqua sunt elongatè vel lineari-lanceolata, acuminata, indivisa, basi rotundata, longiora semipedalia et infernè* 3 *quartas partes unciæ lata. Cæterum omnia alterna, integerrima, peltata, saturatè virentia, ad oras et ad nervum medium dorsalem per lentem villosula, cæterum glabra, adultiora ad nervum et venas in facie ex cinereo maculata.* Petioli *ad lentem villosuli, supra medium duabus glandulis obtusis instructi.* Stipulæ *subulatæ, parvæ.* Pedunculi *uniflori, oppositi, laterifolii, filiformes, supernè geniculati, semunciales.* Flores *parvi.* Calycis *quinque-partiti foliola oblonga, obtusa, patentissima, ex viridi albida.* Cor. 0. Corona *radiata,* interior (operculum) *erecta, brevis purpurea;* exterior *patentissima, flavescens.* Anth. *flavæ.* Germ. *glabrum.* Stig. *flavescentia.* Bacca *ovalis, semuncialis, glabra, atrocærulea, pulpâ dulci:* sem. *compressula, cinerea cum rugis elevatis nigricantibus.* Jacq. loc. cit.

A small inconspicuous flowered climber, which mingles itself among bushes in the island of Jamaica. Introduced into this country about 1773.

Stem shrubby, about four feet high, slender, round, branching, smooth, ash-coloured, with a corky rind in the old wood. Lowermost *leaves* three-lobed, upper entire long-lanceolate, 3-6 inches long, about ¾ of an inch broad, rounded or subcordate at the base, nerved, deep green; inspected through a magnifier the edge and the underside of the midrib are perceived to be slightly villous: *petioles* short obscurely villous, bearing two small glands beyond the middle: *stipules* 2, subulate, small. *Peduncles* axillary, twin,

opposite, filiform, about half an inch long, jointed above the middle, flexile, one-flowered. *Flowers* small. *Calyx* greenish white, from patent to reflectent; segments oblong, obtuse. *Corolla* none. *Crown* double, outer rank of rays yellow, longest, entirely patent: *operculum* or lid of the nectary violet-coloured. *Anthers* yellow. *Germen* smooth. *Stigmas* yellowish. *Capsule* oval, about half an inch long, smooth, of a black-blue colour, with a sweet pulp: *seeds* somewhat flattened, grey, with raised black wrinkles. We had no opportunity of observing the flower after the drawing was made; and have trusted to the authors who have described it, for the above.

The drawing was made from a plant which flowered in the hothouse at Messrs. Whitley, Brames, and Milnes, at Parson's Green.

a An inner ray of the crown. *b* An outer ray of the same. *c* The operculum or lid of the nectary. *d* The dissepiment or partition of the nectary. *e* A segment of the calyx.

MALPIGHIA fucata.

Rouge-flowered stinging Barbadoes-Cherry.

DECANDRIA *TRIGYNIA.*

Nat. ord. MALPIGHIÆ. *Jussieu gen.* 252.
Div. II. Germen simplex. Fructus monocarpus.
MALPIGHIA. *Suprà vol.* 2. *fol.* 96.

M. *fucata*, ramis glabris, foliis ellipticis nitidis subtèr decumbenti-hispidis supèr nudiusculis; floribus axillaribus umbellatìm corymbosis: petalo summo submajore margine lacinulato.

Arbuscula *erecta, ramosa, glabra.* Folia 4-*uncialia ultràve elliptica, acuta, nitida, intensè viridia, costato-nervosa, subtùs hispidata aculeis setiformibus bicuspidatis fragilibus urentibus fulvis longitudinalibus à medio affixis superficiei folii parallelo-approximati, suprà iisdem obsolescentibus raritèr consita.* Pedunculi *(tripartiti?) corymboso-umbellati, axillares, oppositi brevissimi:* pedicelli *plurimi, uni-biunciales, uniflori, bracteatìm interstincti, robusti, teretes, suprà subclavati, paulò altiùs basi geniculo bisquamuloso articulati.* Cal. *parvulus segmentis 5 ovato-oblongis obtusis concavis, germini adaptatis, dorso carunculâ didymâ elevatâ ellipticâ poris 2 mediis guttiferis pertusâ onustis.* Cor. *irregularis, rotato-explanata, carnosa, firma, albido-rosea:* pet. *cochleari-spathulata, distantia,* 3 superiora *majora lacinulato-dentata, medio cæteris submajore hastàto-rotundo atque insigniùs inciso;* 2 *ima hastato-ovata, integra.* Stam. *longitudine unguium petalorum, infra medium monadelpha, suprà conniventia:* anth. *oblongæ, flavæ, ad basin filamento brevi subulato infixæ, biloculares, introrsùm dehiscentes, loculis collaterali-adnatis parti planæ introversæ receptaculi crassi oblongi posticè carinati.* Germ. *nitens, ovato-oblongum, rotundatè trigonum;* stylis *tribus filiformibus continuis parùm brevioribus, fine stigmatoso plano-obtusato.* Flores *clausi pentagono-globosi, iisdem clausis* KALMIÆ latifoliæ *non dissimiles.*

We have not traced the present plant in any published species. It is throughout upon a far larger scale than *urens* of the 96th article of this work. Said to have been received from Germany a few years back by Messrs. Whitley, Brames, and Milne, of the Parson's Green nursery, where the drawing was taken. Probably native of the West Indies; requires to be kept in the bark-bed of the stove, where it flowers for a long time in success on and at various seasons.

MALPIGHIA is separated from BANISTERIA, which it resembles in flower and habit, by its unilocular three-stoned drupe, in which the stones or nuts are one-seeded; the fruit of the latter being three one-seeded samaras or keys,

with a simple wing at the end of each, like those we see on the common Maple.

Fucata forms an upright branching smooth shrub, not exceeding 3 or 4 feet in the specimens we have seen. *Leaves* 4 inches long or more, elliptic, acute, bristled beneath with decumbent brittle stinging double-pointed prickles fastened at the middle, as in other species of the genus, above nearly free from this armature. *Peduncles* opposite, axillary, umbellately corymbose, very short: *pedicles* many, an inch or two in length, one-flowered, parted by bractes, substantial, round, somewhat thickened towards the flower, with a double-scaled knee or joint, a little above the base. *Calyx* small, green, segments ovate-oblong, obtuse, concave, fitted to the germen, each with a two-pored prominent elliptic twin caruncle nearly equal to itself at the back. *Corolla* irregular, rotate, fleshy, brittle, of a whitish pink colour: *petals* spatulate, distant, with a narrow unguis and broad lamina; three upper ones larger jagged or unevenly indented, the middle of the three rather the largest hastately orbicular and more markedly cut at the edge; two lowest hastately ovate, entire. *Stamens* the length of the ungues of the petals, monadelphous below the middle, distinct and connivent above: *anthers* oblong yellow, inserted by their base at the point of a short subulate filament, bursting inwards, the two cells growing to the flat introverted front of the thick oblong receptacle with a keeled back. *Germen* shining, ovate-oblong, rounded-trigonal, with three filiform scarcely shorter continuous *styles*; each having a blunted point for *stigma*.

The corolla, when closed, reminds us of that of the well-known Kalmia *latifolia* in the same state.

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a The calyx when the corolla is removed. *b* The stamens. *c* The pistil. *d* An unripe drupe with the three persistent styles. *e* A transverse section of the same, showing the three imperfect nuts or stones.

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EUPHORBIA punicea.

Scarlet Spurge.

DODECANDRIA *TRIGYNIA.*

Nat. ord. EUPHORBIÆ. *Jussieu gen.* 385.
Div. I. Styli plures definiti, sæpiùs tres.
EUPHORBIA. Hermaphrodita. *Cal.* 1-phyllus turbinatus, limbo 4-5 dentato, dentibus inflexis. *Petala* 4-5, calyci alternè dentibus calycinis externè inserta, formâ varia, crassiuscula, nunc glanduliformia, nunc simplicia, nunc 2-3-fida aut rariùs multifida. *Stam.* indefinita 12 aut plura, rariùs pauciora; *filamenta* receptaculo inserta, medio articulata, diverso tempore erumpentia; *antheræ* didymæ. Istis fertilibus interjiciuntur alia sterilia paleacea aut squamosa, definita aut sæpiùs indefinita, simplicia aut sæpiùs ramosa vel fimbriata. *Germen* inter stamina centrale stipitatum 3-gonum; *styli* 3. *Capsula* stipite reflexo extrà calycem nutans 3-cocca 3-sperma. *Plantæ lactescentes, herbaceæ aut fruticosæ, erectæ aut rariùs repentes, aphyllæ aut sæpiùs foliosæ.* Jussieu gen. 385; (nonnullis variatis).

E. *punicea,* umbella quinquefida; trifida, involucellis ovalibus acuminatis coloratis, capsulis glabris foliis obovato-lanceolatis subtùs glaucis. *Swartz prodr.* 76.
Euphorbia punicea. *Swartz ind. occid.* 2. 873. *Hort. Kew.* 2. 148. *ed.* 2. 3. 167. *Smith ic. pict.* 3. *Jacq. ic. rar. t.* 484. *coll.* 2. 179. *Willd. sp. pl.* 2. 916.

A favourite decoration of our hothouses. Introduced from Jamaica in 1778, by Mr. Wallen. It is a smooth fleshy-wooded milky shrub, attaining sometimes the height of seven feet. In the present specimen Mr. Edwards appears to have met throughout with only two leaflets to each scarlet partial involucre: the number varies to 3.

In place of the detailed description of the species, we have subjoined, from Mr. Brown's instructive treatise on the botany of Terra Australis, in the Appendix to Flinders's Voyage, an opinion of the structure of the flower, formed subsequently to that laid down by Linnæus, which still continues the routinary precedent of the systematic catalogues.

"The view I take of the structure of EUPHORBIA is, in "one important particular at least, different from those "given by Lamarck, Ventenat, Richard and De Candolle, "though possibly the same that Jussieu has hinted at; so "briefly, however, and I may add obscurely, that if his "supposition be really analogous to what I shall presently "offer, he has not been so understood by those who profess "to follow him in this respect."

" With all the authors above quoted I regard what Linnæus has called calyx and corolla in EUPHORBIA, as an involucrum, containing several staminiferous flowers which surround a single pistilliferous flower. By some of these authors the staminiferous flowers are described as monandrous (one-stamened), and in this respect, also, I agree with them; but the body which all of them describe as a jointed filament, I consider to be made up of two very distinct parts, the portion below the joint being the footstalk of the flower, and that above it the proper filament: but as the articulation itself is entirely naked, it follows, that there is no perianthium; the filiform or laciniated scales, which authors have considered as such, being on this supposition analogous to bracteæ; the pistilliferous flower, in conformity with this supposition, has also its pedunculus, on the dilated, and in a few cases obscurely lobed, apex on which the sessile germen is placed. If this be a correct view of the structure of EUPHORBIA, it may be expected that the true filament, or upper joint of what has commonly been called filament, should, as in other plants, be produced subsequent to the distinct formation of the anthera, which consequently will be found at first sessile on the lower joint or peduncle, after that has attained nearly its full length; and accordingly this proves to be the case in such species as I have examined. Additional probability is given to this view by the difference existing between the surfaces of the two joints in some species. I consider it, however, as absolutely proved by an unpublished genus of this order, having an involucrum nearly similar to that of EUPHORBIA, and like it, inclosing several fasciculi of monandrous staminiferous flowers, surrounding a single pistilliferous flower; but which, both at the joint of the supposed filament, and that by which the germen is connected with its pedicellus, has an obvious perianth, regularly divided into lobes."

The drawing was made at Mr. Creswell's, of the Priory, Battersea.

a f The pedicled germen of Linnæus: the peduncled pistilliferous flower and sessile germen of Brown. *b* The barren filaments of L.: the bracteæ of B. *c* The stamens of L.: the monandrous peduncled flowers of B. *e* The calyx of L. *d* The corolla of L.; which two last are considered together as the involucre of the flower by Mr. B.

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BARLERIA mitis.

Yellow thornless Barleria.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. ACANTHI. *Jussieu gen.* 102. *Div. I.* Stamina 4 didynama. ACANTHACEÆ. *Brown prod.* 1. 472.

BARLERIA. *Cal.* 4-partitus inæqualis, laciniis 2 lateralibus angustioribus, 2-bracteatus bracteis interdùm spiniformibus. *Cor.* infundibuliformis. 5-fida, laciniâ quintâ profundiore. *Stamina* 2, cæteris multò breviora. *Stigmata* 2, rariùs 1. *Caps.* sub4-gona, dissepimento absque unguibus dissiliente, loculis 1-2-spermis. *Suffrutices aut herbæ; foliorum axillæ in quibusdam spinosæ, spinis solitariis aut geminatis; flores axillares aut terminales.* Jussieu gen. 103.

Div. Inermes.

B. *mitis,* inermis; foliis lanceolatis appresso-hirtis integerrimis; floribus aggregato-terminalibus tubato-elongatis: bracteis angustissimis subulato-linearibus setoso-ciliatis.

Frutescens, erecta, ramosa ramis infernè nudis. Folia *opposita, patentissima, ad ramorum apices conferta, lanceolata, nervosa nervis ascendentibus subtùs varicosis atque pilis appressis setaceis densiùs consitis, 5-uncialia, latitudine sesquiunciali, deorsùm longiùs attenuata in brevem atque crassum petiolum, subtèr pallida reticulato-venosa pilis rarioribus.* Flores *plures, luteæ, summis ramis sessili?—aggregati, laxi sesquiunciales.* Bracteæ 2 *oppositæ calyci arctè suppositæ ferèque eidem æquilongæ angustissimè lineares appresso-hirtæ, setis fulvis dentato-ciliatæ.* Cal. *ut bracteæ sed pubescens dentibus ciliis conspicuioribus præfixis, nervoso-striatus,* foliolis 2 *majoribus lanceolato-ovatis aristato-acuminatis dimidium corollæ æquantibus v. superantibus,* 2 *alternis parvulis lanceolato-linearibus.* Cor. *tubæformi-cylindrica, extùs lanuginosa;* tubus *triplo longior limbo vel magis, diametro pennæ scriptoriæ mediocris, recurvulus;* limbus *subbilabiatus, subæqualis, laciniis* 4 *supremis æqualibus oblongis acutulis recurvo-patentibus, imâ quintâ majore revolutâ.* Fil. *ad lineam parcè barbatam tubum ad altitudinem germinis cingentem inserta;* 2 *longiora cum* antheris *majusculis tubo exsertis, flavis sagittato-oblongis, bilocularibus, polline (sub lente) è sphærulis luteis granuloso:* 2 alia *ferè triplo breviora, antheris effœtis nullisve.* Germ. *disco brevi crasso cupulato insidens, ovato-acuminatum, viridiusculum nitidum, biloculare, loculo singulo ovulis* 2 *lenticularibus fœto:* stylus *albus, tenuis filiformis:* stigma *simplex?*

A plant we have seen in no collection except in that of Messrs. Lee and Kennedy of the Hammersmith nursery, where it first flowered in the tan-bed of the hothouse in February last. We have not been able to identify it with any published species. We are informed by Messrs. Lee and Kennedy, that the plant was received by them from Paris. Probably native of the East Indies?

An upright branching shrub, without spines; but of the size it may attain we are not yet entitled to speak; branches leafless downwards. *Leaves* about five inches long, one and a half broad, opposite, spreading, crowded towards the end of the branches, lanceolate, entire-edged, covered with a flat-pressed rough nap thickest on their upper surface, much farther tapered towards the short thick petiole than towards their point, pale and reticulately veined at the under surface, nerves ascendent varicose beneath, and thickly set with flat-pressed bristly hairs. *Flowers* yellow, several, about an inch and a half long, of the circumference of a middle-sized pen, loosely aggregate at the end of the branches. *Bractes* two, opposite, close, under the calyx, nearly of the length of that linear, slender, flatly hirsute, indented and bristly ciliated; bristles tawny. *Calyx* pubescent in the same manner as the bractes, except that the bristles which terminate the teeth at their edge are more conspicuous, nervedly streaked; two larger leaflets lanceolately ovate, pointed awned equal to about half the length of the corolla or rather more, two alternate small ones lanceolately linear. *Corolla* cylindric, trumpet-formed, downy on the outside; *tube* 3 times longer than the limb, slightly recurved; *limb* or *border* slightly bilabiate, nearly equal, 4 upper segments exactly equal, recurvedly spreading, oblong, rather pointed, the fifth lowest largest and revolute. *Filaments* inserted in the tube on a line with the top of the germen, where a thin bearded pubescence marks the position; *two longer* protruding beyond the tube; *anthers* of a golden yellow, sagittately oblong, bilocular; *pollen* of these (when slightly magnified) granular, granules yellow globular; *two much* shorter, with small effete anthers, concealed within the tube. *Germen* placed in a shallow thick cupular disk, ovately tapered, shining, bilocular, each cell having two lenticular ovules: *style* filiform, white: *stigma?*

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a A flower dissected vertically.

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Syd. Edwards del. Smith sc.

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Smith sculp.

BRUNSVIGIA Josephinæ β. *angustifolia.*

Narrow-leaved Brunswick-lily or Chandelier-flower.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germen inferum. AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I.* Radix bulbosa. Flores spathacei umbellati, rarò solitarii.

BRUNSVIGIA. *Umbella* terminalis pluri-numerosiflora, *bracteis* interstincta, *spathâ communi* bivalvi longior. *Cal.* 0. *Cor.* tubuloso-6-fida v. hexapetalo-partita, irregularis v. regularis, subæqualis, hypocrateriformis v. infundibuliformis v. stellato-divaricata, rarò pseudo-resupinata rictû introrsùm obliquato. *Fil.* disco medio v. tubo inserta, erecta v. declinata, inclusa, alternè longiora. *Stylus* inclinatus: *stigma* simplex v. obsoletè trina. *Caps.* membranacea, sæpè diaphana, turbinata v. obovata, alatè v. acutè lobato-trigona, pedunculi clavato-continua, 3-loc., 3-valv. valvis medio septigeris: *loculamenta* oligosperma, infernè arctata atque cassa: *semina* angulo interno affixa, modò oblonga cum testâ nigrâ, sæpiùs tuberoso-laxata (non verò ad normam loculamenti) majuscula atque irregulari-rotundata v. parvula atque sphærica.

Bulbus *tunicatus, integumentis membranoso-fibrosis multiplicibus corticatus;* axis rhizomatosa *sæpè de basi extans radiculis crassis, interdùm tuberosis.* Folia *pauca-plurima, bifaria, brevia elliptica lata ad longa lorata atque angusta, utplurimùm tardiora* scapo *sæpiùs compresso ipsisque plurimùm breviore. Flore tenùs* AMARYLLIDI *hinc,* HÆMANTHO *indè accedit; fructû tenùs ad* MASSONIAM *vergit.*

B. *Josephinæ,* foliis plurimis lorato-elongatis erecto-patentibus glaucis; scapo duplo longiore radiis umbellæ: corolla pseudo-resupinata.

Brunsvigia multiflora. *Nob. in Recens. liliac. Redoutæi in Journ. of Science and the Arts* I. 177. *col.* 2; *malè quoad speciem.*

Amaryllis Josephinæ. *Redouté liliac.* 370, 371, 372.

(α) foliis coriaceo-firmis glaucissimis.

(β) foliis duplo v. triplo angustioribus, viridi-glauciusculis, tenerioribus.

Bulbus *magnitudine ovi gallopavonacei, integumentis fuscis.* Scapus *strictus, teres, obsoletè et rotundatè anceps, glaucus, sesquipedalis crassitudine digiti.* Spatha *multiflora, sphacelata, valvis ovato-lanceolatis aliquotiès brevioribus pedunculis.* Umbella *radiato-divaricata, strictissima, distans;* pedunculi 6-9-*unciales, crassi, recti, rotundatè trigoni, estriati, exsulci, glauci, supernè violaceo tincti, apice curvaturâ leni deflexi.* Flores *inodori, coccineo-punicantes, infernè pauco flavo varii, duplo v. triplo breviores pedunculis.* Germ. *subobovato-oblongum, rotundatè trigonum, exsulcum, estriatum, viridi-purpurascens, glaucum, subsemunciale.* Cor. *horizontali-assurgens, resupinatam simulans ob labium imum antrorsùm elevatum et summum retrorsum depressum undè rictus introrsùm obliquatur (quod non aliàs in genere occurrit nisi in* multiflora;) *infundibuliformis, 3-uncialis magìsve, crassiùs carnosa, rigida, pro ¼ partibus fissa, externè lucens:* tubus *crassus trigonus germine aliquantulò longior at subisoperimeter, in faucem curvaturâ anticâ ventricosiore ampliatus:* limbus *unicolor revoluto-campanatus;* laciniæ *lanceolatæ, concaviusculæ, utrinque obsoletè involutæ, 3 exteriores hamato-apiculatæ:* labium imum *v.* externum *longius, distantius, recurvum, assurgens, laciniâ mediâ*

omnium angustiore ex inflexis lateribus fasciculum stamineum cum stylo complectente; labium supremum *v.* internum *depressius reflexum, laciniis sublatioribus profectò inter se similibus.* Stamina *secùs laciniam mediam labii imi inclinata, teretia, robusta, punicea, ¼ parte breviora corollâ:* anth. *vibratæ, oblongæ, profundè sanguineæ,* polline *sulphureo.* Stylus *exsertus, arcuato-assurgens, teres, tristriatus, parùm crassior filamentis, ruber:* stigma *punctum obtusum obsoletè trigonum puberulum.* Caps. *pallida, reticulato-venosa, obovato-oblonga, lobis acutis parùm profundis;* semina *tuberosa globosa, piso duplo minora.*

Before we had seen Brunsvigia *Josephinæ* in the plant, and judging solely from the figure in the Liliacées, we conceived it to be of the same species as the Brunsvigia *multiflora,* most correctly represented in the 1619th article of Curtis's Botanical Magazine. But a view of the two plants themselves has convinced us that we had judged wrong; they agree, indeed, considerably in appearance, and exactly in the singular character of a counterfeit-resupinate corolla, the inflexion of the two lips of the limb being the reverse of that which is the usual one, while the general posture of the corolla is unchanged. The lower lip is here the ascendant and projecting one, while the upper is the depressed and recedent one—an anomaly in the natural order beyond the two species. Giving too much weight to this remarkable feature, we had neglected other differences when we considered *multiflora* and *Josephinæ* as of the same species.

The present drawing was taken at the never-failing source of curious and beautiful *Liliaceæ,* Mr. Griffin's collection at South Lambeth: it had been very lately imported by that gentleman from the Cape of Good Hope, where it was collected in the district of Hantam. We had some hesitation in believing our plant to be of the same species as *Josephinæ;* but Mr. Griffin is persuaded that the difference between the two, which indeed consists principally in size, proceeds from his specimen being the produce of a bulb much younger than that from which the figure in Redouté's work was taken.

In *multiflora* the leaves are about 4, short, obovately oblong, very broad, bright green, and flatly recumbent on the ground; in our plant they are 9 or more, lorately elongated, slightly lanceolate, upright, recurvedly patent, and glaucous. There the scape is scarcely longer than the peduncles of the flowers; here twice the length of them. There, the peduncles are shorter and trigonal, with three

deep furrows; here, nearly round, furrowless, and much longer in proportion to the flower. In *multiflora* the germen is turbinate and trigonal, with deep acutely prominent lobes; in the present plant, oblong and nearly cylindrical. There, the corolla is wider, of a somewhat urceolate form, tubeless, and intersected from the apex of the germen by a deep constriction at the base; here, the corolla is narrowly funnel-form, with a conspicuous trigonal tube, which is rather longer than the germen, and has no remarkable constriction at the junction with it: here, the style protrudes beyond the corolla; not so there. They differ also in the colour of the flower. The capsule of *multiflora* is turbinate, broad ventricose, and depressed at the top, and from two to four inches long, with deep-winged lobes, divaricately veined, and nearly transparent; in the present plant the capsule is scarcely an inch and a half long, obovately oblong, with shallow, but acutely cornered, lobes reticulately veined and opaque. *Multiflora* conveys to our fancy the idea of unsymmetrized bulkiness, the present plant that of symmetry and lightness.

The specific name of *Josephinæ* was a tribute of respect from the author of the *Liliacées* to the late repudiated Empress of France, a munificent patroness of botany and horticulture, by whom the fine collection in the garden of La Malmaison was formed, and to whose fostering care we are indebted for more than one of the most splendid botanical works which have ever appeared.

The *bulb* in the variety (α), figured in the Liliacées by M. Redouté, was larger than the egg of an ostrich; the *leaves* three feet or more in length, much firmer and broader than in (β), the present, and very blue; the *umbel* was above two feet and a half in diameter, and had 60 flowers; its *stem* as thick as a child's wrist. In (β), as it flowered at Mr. Griffin's, the *stem* was about a foot and a half high, and about the thickness of a finger; leaves, about two feet long and an inch and a half broad, apple green, slightly glaucous; umbel, few-flowered, as may be seen in the diminished figure we have added; corolla, about three inches deep.

Messrs. Lee and Kennedy are in possession of an offset from the plant which flowered at La Malmaison.

BRUNSVIGIÆ SPECIES.

multiflora. *Hort. Kew.* 2. 2. 230. *Nob. in Curtis's mag.* 1619.
Josephinæ. (α) *Redouté liliac.* 370, 371, 373. (β) *in loco præsenti.*
falcata. *Nob. in Curtis's mag.* 1443. AMARYLLIS. *Hort. Kew. l. c.* 223.
marginata. *Hort. Kew. l. c.* 230. *Jacq. hort. schænb.* 1. 34. *t.* 65.
Radula. *Hort. Kew. l. c.* *Jacq. l. c. t.* 68.
striata. *Hort. Kew. l. c.* *Jacq. l. c. t.* 70.
toxicaria. *Nob. suprà fol.* 139 *in notâ.* HÆMANTHUS. *Nob. in Curtis's mag.* 1217. *Jacq. fragm.* 36. *n.* 116. *tab.* 39. *et tab.* 41. *fig.* 1; *aliisque.*
ciliaris. *Nob.* HÆMANTHUS. *Jacq. fragm.* 36. *n.* 117. *tab.* 40. *fig.* 1. *tab.* 41. *fig.* 2; *aliisque.*

NOTE.

Crinum bracteatum. *Suprà fol.* 179.

We have omitted in that article the subjoined synonym.

Crinum asiaticum. *Redouté liliac.* 248; *(nec. aliorum).*

The CRINUM *americanum* 332 of the Liliacées is the true *asiaticum.* Both these corrections had escaped us in the review of Redouté's work in the Journal of Science and of the Arts.

Syd. Edwards. del. Pub. by J. Ridgway & Sons. 170 Piccadilly. May. 1. 1817 Smith sculp

RHODODENDRON dauricum β. *atrovirens.*
Siberian Rhododendron; with a purple flower.

DECANDRIA *MONOGYNIA.*

Nat. ord. Rhododendra. *Jussieu gen.* 158. *Div. I.* Corolla monopetala.
RHODODENDRON. Suprà vol. 1. *fol.* 37.

R. *dauricum*, foliis glabris utrinque nudis, corollis rotatis. *Linn. sp. pl.* 1. 562.
Rhododendron dauricum. *Pall. ross.* 1. 47. *t.* 32. *Andrews's reposit.* 4. *Curtis's magaz.* 636. *Hort. Kew.* 2. 66. *ed.* 2. 3. 49.
Andromeda foliis ovatis utrinque punctatis. *Gmel. sib.* 4. 124. *n.* 10.
Chamærhododendros folio glabro majusculo, amplo flore roseo. *Amm. ruth.* 181. *n.* 261. *t.* 27.
(α) foliis hyeme fusco-purpurasentibus subdeciduis; flore roseo.
(β) foliis atroviridibus immutato-sempervirentibus; flore violaceo-rubro.
Rhododendron dahuricum. *β. Curtis's magaz.* 1888.

Frutex *stoloniferus* 3-*pedalis nunc duplus;* caulis *truncus brevis crassus nodosus basi tuberiformis, cortice cinereo;* rami *teretes, stricto-virgati, non flexuosi, decrescentèr ramulosi, ramulis in summitate confertiùs foliatis, viridi-purpurascentibus, resinoso-punctatis, lanuginosis.* Folia *aromatica, coriacea, ovali-oblonga, atrovirentia, emarginato-obtusa, utrinquè punctata, suprà nitida, subtùs pallidiora resinoso-leprosa, brevè petiolata, duplo v. ultrà longiora quàm lata, lateribus sæpiùs revoluta.* Flores *ramulorum prioris anni terminales, nutantes subsolitarii, è gemmâ viridi-squamosâ,* squamæ *rotundo-ovatæ, parvulæ, obtusæ resinoso-punctatæ:* pedunculus *pallidus, brevior corollâ, carnoso-corrugatus.* Cal. *disculus crassus vix duplo latior pedunculo cujus concolor et velut apex, obsoletè pentagonus.* Cor. *subbilabiato-rotata, basi brevè tubuloso-arctata et extùs quinquangula; semiquinquefida laciniis rotundatis undulatis,* 3 *summis subconniventibus,* 2 *imis minoribus.* Fil. *inæqualia, longiora excedentia corollam, sanguinea, declinata, infernè lanuginoso-barbata:* anth. *subrotundæ, nigricantes, apice poro gemino dehiscentes.* Stylus *staminibus longior, eorum concolor, glaber, filiformis, suprà crassior:* stig. *punctum obtusum parùm dilatatum atrosanguineum, subquinquelobulatum:* germ. *conicum, obsoletè pentagonum, resinoso-leprosum.*

In considering the differences between the present plant and the one usually known in our collections as the Rhododendron *dauricum,* we do not find them of a nature to decide the specific separation of the plants; in other words, they are differences that do not appear to exceed the limits of the variation which daily experience proves to take place among the unadulterated offspring of a same parent-plant.

The leaves in β are of a darker green than in α, and

do not change to a brownish red, nor fall off entirely or in part previous to the expansion of the blossom, as they do in that. The corolla is here of a violet red or purple, not of a pale rose colour as there. α, upon the whole, is a finer variety than β, the common one.

The species is distributed over a great part of Siberia, and has been observed to extend itself through the deserts of Mogol Tartary to China and Tibet. It grows very commonly in the pine-forests; and in some parts in such profusion, and so densely, as to make whole tracts appear a sheet of purple in April and May, the period when it is in blossom. The leaves are sometimes used as a substitute for those of the Tea-tree. The new foliage is put on after the departure of the bloom.

A shrub, from three to six feet high; trunk, short knobbed thick, rounded at the root in the form of a tuber; bark, ash-coloured; *branches*, straight upright round and wandlike, with gradually decrescent branchlets, closely leaved at the summit, where they are downy and resinously dotted; *leaves*, aromatic, leathery, ovally oblong, dark green, emarginately obtuse, thickly punctured on both sides, shining on the upper, paler on the other with furfuraceous dots, twice as broad as they are long or more, shortly petioled, often revolute at the sides. *Flowers*, at the ends of the last year's branchlets, nodding, generally issuing singly from a green scaly bud; *peduncle*, shorter than the corolla, pustulous and wrinkled. *Cal.* a thick roundish obsoletely five-cornered fleshy button or knob, of the same colour as the peduncle, of which it looks like the summit dilated. *Corolla* subbilabiately rotate, shortly narrowed at the base, and externally five-cornered, half five-cleft, with rounded undulate segments, the upper ones forming the overhanging lip; two lower nearer, smaller. *Filaments* unequal, longer ones reaching above the edge of the corolla, blood-coloured, declined, bearded towards the base. *Anthers* roundish, black, opening by a double aperture at their summit. *Style* longer than the filaments, and of the same colour, smooth, filiform, thickening at the top; *stigma* an obtuse slightly dilated point, with five small indentations, of a black purple colour.

Our variety is supposed to have been introduced twenty years ago from Russia, by Mr. Thomas Bell. It is perfectly hardy; but requires to be planted in bog-earth. The drawing was made at the nursery of Messrs. Whitley, Brame, and Milne, at Parson's Green, in the beginning of March.

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RHODODENDRON hybridum; *bigener.*

Mr. Herbert's Mule Rhododendron.

DECANDRIA *MONOGYNIA.*

Nat. ord. RHODODENDRA. *Jussieu gen.* 158. *Div. I.* Corolla monopetala.

RHODODENDRON. *Suprà vol.* 1. *fol.* 37.

Rhododendron *hybridum;* bigener.
Pater. Rhododendron maximum. *Ex Dom. Herbert.*
Mater. Azalea viscosa; *var. glauca.* *Ex Dom. Herbert.*

Convenit cum patre, *foliis coriaceis sempervirentibus, numero staminum, rubedine et expansione limbi corollæ; cum* matre *foliorum glaucedine et horum majore in utrumque finem attenuatione, corollæ tubo cylindraceo-elongato et albo; vicissimque ex utrinque quoad alia plura minoris notæ.*

Of the existence of hybrid or mule productions from two plants of distinct species of the same genus, or even of different nearly allied genera, no one can have to be informed at this time of day. The present pretty shrub is an instance of this kind, having been raised by Mr. Herbert, at Spofforth, near Wetherby, from seed ripened on the common white glaucous-leaved AZALEA, in the flower of which the pollen or dust from the anthers of RHODODENDRON *maximum* had been purposely substituted for that of its own flower.

Mr. Herbert, to whom we feel greatly obliged for this very curious specimen, and for the information relating to it, says; "that the plant is now four years old, and forms a "straight upright growing branching shrub, of about three "feet in height, and about the thickness of a finger near "the root: that the young leaves on their first appearance "are pubescent, and of a lively pale green colour, and not "glaucous, but lose their pubescence, and acquire a re-"markably glaucous hue as they harden, especially in the "autumn: the rind brown, and splitting like that of hazel-"wood: that the inflorescence on a warm sunny day dif-"fuses a considerable fragrance: that the plant from which "the drawing was made, had been flowered in the hot-"house, and is at present unique; only one seed having been

" produced in the capsule, from which the plant was ob-
" tained; but that of course this may be hereafter multiplied
" by layers."

The same gentleman is persuaded that by such intermixture new species may be created among vegetables, capable of continuing a distinct race by the natural descent of an unadulterated progeny, to an indefinite extent, and without reverting to the single form of either parent-plant. As far as we have an opinion on the subject, it tends to the reverse of this position. We believe no truly hybrid plant, under any circumstances, will continue an unadulterated descent through seeds beyond a very limited number of degrees; and that the less complete productions of this kind, such as take place between remarkable varieties of one species, revert to the single likeness of either parent, or assume new appearances in endless vicissitudes.

The present plant takes after the RHODODENDRON in its coriaceous evergreen foliage, the number of its stamens, the redness and expansion of the limb of the corolla; after the AZALEA in the blueness of the leaves, the tapering of these towards each end, in the cylindrical elongation and whiteness of the tube of the corolla; and interchangeably after both parents in various points of smaller note.

It may be observed that although the plant is a mule of two species of different genera, and not of two species of one genus, yet as these genera might have been easily kept in one, being such as are very closely allied in nature, for AZALEA varies with five and ten stamens, in the same species; that the term "bigeneric hybrid," in this instance, is more formal than essential.

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HYPERICUM ægypticum.

Egyptian St. John's-wort.

POLYADELPHIA *POLYANDRIA.*

Nat. ord. HYPERICA. *Jussieu gen.* 254.

HYPERICUM. *Cal.* 5-partitus æqualis. *Pet.* 5. *Stam.* variè polyadelpha. *Styli* 3 aut 5 aut rariùs 2; *stigmata* totidem. *Caps.* (*bacca* in *Androsæmo*) loculis et valvis totidem. Herbæ aut frutices suffruticesve; caules *cylindracei aut ancipites aut 4-goni;* folia *opposita sæpè punctato-pellucida;* flores *oppositi nonnunquàm cymosi, plerùmque corymbosi pedunculis sæpè trichotomis 3-floris terminalibus aut et axillaribus.* Juss.

Div. Trigyna, calycibus integerrimis.

H. *ægypticum* floribus trigynis, nectariis petalorum lanceolatis, caulibus suffruticosis compressis. *Linn. sp. pl.* 2. 1103.

Hypericum ægypticum. *Linn. amœn. acad.* 8. 323. *tab.* 8. *fig.* 3. *Hort. Kew.* 3. 105. *ed.* 2. 4. 429. *Lamarck encyc.* 4. 160. *Willd. sp. pl.* 3. 1467.

Fruticulus *erectus subpedalis, propè de basi brachiato-ramosissimus, floribundus;* rami *teretes patuli, juniores toti foliati* ramulisque *solitariis brevibus axillaribus subsexfoliatis apice unifloris uno terminali decussato-paniculati.* Folia *sessilia, decussata, patentia, coriaceo-crassa, glauco-pruinata, subbilinearia, ovato-elliptica, acuta, plana, avenia, non pellucido-punctata, internodiis sublongiora.* Flores *parvuli, erecti, solitarii, terminales, lutei.* Calyx *inter bracteas foliaceas 2 oppositas ipsi duplo breviores sessilis, viridi-lutescens, sæpius rubore tinctus, connivens, æqualis unguibus petalorum, persistens;* foliola *ovata, convexa, acutula integerrima, duriuscula.* Cor. *campanulata, flava, pellucido-lineata vix ⅓ partem unciæ alta;* pet. *spathulato-oblonga, infernè in tubum conniventia supernè recurvo-patentia, obtusa, squamulâ lineari-oblongâ ob marginis attenuati inflectionem concavâ uniuscujusque ungui longitudinalitèr intùs adnatâ.* Staminum phalanges 3, *erectæ, tubo parùm longiores, pede tubuloso compresso pallido suprà in filamenta distincta ipsi breviora secedente:* anth. *subrotundæ, flavæ, introversæ.* Pistillum *pallidum, pedibus stamineis brevius, ovato-oblongum, trilobo-trigonum angulis rotundatis;* styli 3 *loborum totidem rostratim continui, brevissimi, replicati,* stigmatibus *totidem papuloso-convexis parùm latioribus terminati.* Corpuscula 3 *intra calycem hypogyna subrotunda lutea lobos germinis basi intercipientia. Defloratâ corollâ arctè connivet calyx.*

In Willdenow's Species Plantarum, in the late edition of the Hortus Kewensis, and indeed in all the recent enumerations of plants, this species has been deposited in a section of the genus intended for those with serrately and glandularly edged bractes and calyx, while it really belongs to that which comprises such species as have bractes and calyx with a glandless and entire edge: a mistake

perplexing to those who endeavour to determine the plant in any of these works; and which has actually led to its having been very generally confounded by gardeners with *canariense.*

A new genus has been carved from Hypericum, by the title of Elodea, that includes the present species; but seems to us one of those dismemberments of a well-characterized and consistent genus, which offer no equivalent for the disturbance of innovation.

The present plant is native of Egypt, and was introduced in 1787, by M. Thouin. It is a dwarf brachiately branched shrub, seldom exceeding a foot in height, reminding one, as Linnæus observes, of an Arenaria [Sandwort]. Branches spreading, round, younger ones leafy their whole length, decussately panicled, branchlets short axillary solitary, usually minutely six-leaved with a single flower at the end of each. *Leaves* decussated, spreading, sessile, glaucous, frosted, thick and somewhat fleshy, about two lines long, ovately elliptic, flat, pointed, veinless, not transparently punctured as those of the genus commonly are, rather longer than the intervals between the pairs. *Flowers* small, yellow, upright. *Calyx* sessile between two opposite leaves of about half its own length; *leaflets* greenish yellow, usually more or less stained with red, equal to the tubular portion of the corolla, connivent, persistent, ovate, convex, somewhat pointed, rigid, quite entire. *Corolla* campanulate, transparently streaked, scarcely the third of an inch deep; *petals* spatulately oblong, converging by their *ungues* into a tube; *lamina* spreading and recurved, obtuse; *unguis* with a small raised linear-oblong longitudinal concave *scale* growing to the inside of the lowermost part. *Stamens* polyadelphous, in three sets, upright, a little higher than the tube of the corolla, the lower portion of the filaments of each set compressedly tubular for more than half the length: *anthers* yellow, roundish, facing inwards. *Pistil* pale, shorter than the stamineous pipes, ovate-oblong, threelobed-trigonal, corners rounded; *styles* 3, extremely short, continuous, divergent, terminated by the same number of convex papillary slightly wider *stigmas.* *Corpuscles* 3, roundish, yellow, surrounding the base of the germen in the furrows which part the lobes. When the corolla decays, the calyx closes over the germen.

A hardy greenhouse plant, of easy culture and propagation. The drawing was made from a specimen in the collection of Mr. N. S. Hodson, at South Lambeth. Flowers from March to June.

a Calyx. *b* A detached petal. *c* The 3 sets of monadelphous stamens. The pistil and hypogynous glands.

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Syd. Edwards. del.   Pub by J. Ridgway & sons 170 Piccadilly May. 1. 1817.   Smith. sc.

CHIRONIA jasminoides.

Limy jasmine-like Chironia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. GENTIANÆ. *Jussieu gen.* 141. *Div. II.* Capsula simplex bilocularis.

GENTIANEÆ. *Brown prod.* 449.

CHIRONIA. *Cal.* 5-fidus aut ferè 5-partitus, persistens. *Cor.* hypogyna, regularis, marcescens; *tubus* æqualis calyci, limbus major 5-partitus æqualis. *Stam.* summo tubo inserta, *antheris* post deflorationem spiralitèr contortis. *Stylus* declinatus; *stigma* capitatum. Flores *axillares aut terminales. Species quædam suffrutescentes.* Caps. *interdùm subbaccata.* Juss. gen. 142.

C. *jasminoides*, foliis lanceolatis, caule tetragono. *Willd. sp. pl.* 1. 1066.
Chironia jasminoides. *Lin. amœn. acad.* 6. 84. *n.* 5. *Thunb. prod.* 35. *Id. in trans. linn. soc.* 7. 251; (*non tamèn Lamarckii illustr. t.* 108. *f.* 2.).
Chironia jasminoides. β. *Herb. Banks. sub specim. spont. capensi.*

Suffrutex *sempervirens, viscoso-nitens, totus uniformitèr virens, elastico-rigens, subsesquipedalis, paniculato-ramosus;* rami *subtetragoni, erecti, fastigiato-producti, foliati internodiis utrinque sulcatis, sulcorum plagis alternè (secundum foliorum decussationem) mutatis, apice pedunculato-unifiori.* Folia *coriaceo-carnosula, crassiuscula, sessilia (2 opposita basibus non se tangentia), decussata, decurrentia, erecto-patula, internodiis longiora* v. *interdùm breviora, angustiùs oblonga, cuneato-lanceolata cum acùmine brevi, aucta vitreo atomis albis pruinata, dimidium vel ad summum ¾ partes unciæ longa, sesquialteram-*v. *2 lineas lata, plana cum costâ mediâ subtùs prominulâ, manducata amarissima.* Flores *pedunculati, erecti, terminales, solitarii, roseo-rubentes, suaveolèntes, viscoso-lucidi, unciâ profundiores:* pedunculus *vix longior flore, foliolis 2 oppositis basi bracteatus, versùs calycem subcrascescens atque nervoso-angulatus.* Cal. *herbaceus, crassus, oblongus, pentagonus; æqualis tubo corollæ, subsemi-5-fidus, segmentis carinato-lanceolatis, erectis.* Corollæ tubus *albidus, cylindricus, rectus, duplo ferè brevior limbo, visco copioso obductus;* limbus *rotatus, laciniis cuneato-lanceolatis acumine brevi.* Stam. *bis breviora limbo, erecto-conniventia:* fil. *alba:* anth. *iis sublongiores, luteæ, lineares, 4-sulcato-tetragonæ apice sub-4-fidæ, à basi infixæ, erectæ, (nec vidimus contortas; fortè quia nondùm ritè defloratas)?* Germ. *virens, elongato-pyramidatum, angustum, æquale tubo, utrinque suturâ notatum:* stylus *continuus, albus, declinatus, teres, utrinque striatus quasi ex 2 unitis conflatus, duplo longior v. magìs at parùm crassior filamentis, rigidus, viscidus:* stigma *apex obtusus crassiusculus.*

A species long since upon record; having been published by Linnæus, in the name of one of his disciples, from a spontaneous specimen in the Herbarium of the learned Burmann. Yet it does not appear in the Hortus Kewensis; nor is it known by any figure; the one under the name, in the Illustrations of Genera by the Chevalier De Lamarck, obviously representing a different species.

Native of the Cape of Good Hope, but it does not seem to be known when or by whom introduced. The drawing was made from a plant in the nursery of Messrs. Whitley, Brames, and Milne, at Parson's Green; where it flowers in February and March in the greenhouse, requiring the same treatment as the Cape heaths.

Like the generality of its tribe, the whole plant has a very bitter taste, which seems more intense in the viscid secretion, that glazes the exterior.

A suffrutescent elastic evergreen, of a uniform grass-green, about a foot and a half high, paniculately branched; branches subtetragonal, fastigiant, leafy, internodes with a furrow along each side, the furrows changing their fronts with the alternation of the foliage, terminally one flowered. *Leaves* sessile, firm, rather thick, those of a pair not touching at their bases, decussated, erectly spreading, sometimes shorter than the intervals, but in general longer, narrowishly oblong, cuneately lanceolate, with a short point, chagreened by white atomical points, easily distinguished when slightly magnified, from an inch to about one and a half in length, a line and a half or two lines broad, flat; midrib slightly prominent beneath. *Flowers* upright, pink, viscously glazed, rather more than an inch long, very sweet; *peduncle* scarcely longer than the flower, foliaceously bibracteate at the base, growing thicker towards the calyx, where it is angular and nerved. *Calyx* herbaceous, thick, oblong, pentagonal, equal to the tube of the corolla, 5-cleft for about half its length; segments lanceolate, keeled, upright. Tube of the *corolla* white, straight, nearly twice as short as the limb, more copiously smeared with limy secretion than any other part; limb rotate, segments cuneately lanceolate, short-pointed. *Stamens* upright, connivent, twice shorter than the limb; *filaments* white; *anthers* rather longer than these, linear, yellow, tetragonal with 4 furrows, slightly 4-cleft, inserted at the base, upright, not observed by us to wind in spires, after parting with the pollen, as in the rest of the genus; but we suspect that the deviation was caused by the coldness of the season at which we saw the plant in bloom. *Germen* green, pyramidally elongated, narrow, equal to the tube, bisulcate; *style* continuous, white, shelving, seamed along both sides, as if it was formed of two united, limy, rigid.

a Calyx. *b* Corolla dissected vertically. *c* Pistil.

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PAVETTA indica.
Indian Pavetta.

TETRANDRIA *MONOGYNIA.*

Nat. ord. Rubiaceæ. *Jussieu gen.* 203. *Div. VI.* Fructus monocarpus bilocularis dispermus. Folia opposita; caulis plerumque frutescens.
PAVETTA. *Cal.* superus minimus 4-dentatus. *Cor.* tubo gracili, limbo acutè 4-partito-patente. *Anth.* extra faucem subsessiles. (*Bacca* bilocularis. *Sem.* solitaria, bullata: *albumine* cartilagineo. *Gærtn. sem.* 1. 116. *t.* 25. *f.* 1.) *Frutex; flores corymbosi aut conferti terminales.* Juss. l. c.

P. *indica*, foliis oblongis utrinque acuminatis, umbellis terminalibus fasciculatis, calyce brevi acuto. *Linn. suppl.* 121.
Pavetta indica. *Linn. sp. pl.* 1. 160. *Willd. sp. pl.* 1. 610. *Hort. Kew. ed.* 2. 1. 244. *Gærtn. sem.* 1. 116. *t.* 25. *f.* 1.
Pavetta alba. *Vahl symbol.* 3. 11.
Ixora paniculata. *Lamarck encyc.* 3. 344. *illustr.* 205.
Pavetta. *Rheede mal.* 5. 19. *tab.* 10.

Frutex *subtripedalis, erectus, ramosus; rami teretes virides.* Folia *patentia, distantèr decussata, obovato-lanceolata, 3-uncialia v. ultrà, latitudine unciali v. sesquiunciali longiùs in petiolum attenuata, obscurè virentia nitida, subtùs pallidiora atque velutino-villosa, cum costá mediâ varicosâ albicante:* stipulæ 2 *interpetiolares adpressæ acumine sphacelato.* Paniculæ *axillares et terminales, multifloræ, rectæ, brachiato-compositæ, patentes, subcymosæ, pedunculo virente, pedicellis propriis brevibus:* bracteæ *appressæ membranosæ, subpilosæ, summæ obsolescentes.* Flores *candidissimi erecti.* Germ. *exiguum, turbinato-rotundum viride sub lente vitreâ villosiusculum dispermum.* Calyx *minimus, margo concolor 4-dentatus parietis externæ germinis continuus.* Cor. *hypocrateriformis,* ¾ *partes unciæ longa;* tubus *clavato-filiformis, curvulus, 3plo ferè longior laciniis, intra faucem barbatus;* limbi lac. *recurvo-rotatæ, oblongæ, obtusulæ, planiusculæ, intùs basi villosæ cum lineâ villosâ verticali per medium dorsum ductâ, ad finem maculâ minimâ viridi notatæ.* Anth. *viridiusculæ, sagittato-lineares, ore tubi subsessiles, laciniis alternantes, diffuso-patentissimæ, haud multò breviores limbo, defloratæ cinerascentes tortæ, introversæ;* loculis 2 *angustissimis faciei internæ* receptaculi *linearis externè convexi parallelo-adnatis.* Stylus *exsertus capillaceus, erectus, uncialis, priùs quàm panditur corolla flexuosus;* stigma *subclavato-teres viride villosum, apice compresso-subdilatatum, margine suturatim dehiscens, ac si ex lamellulis 2 conferruminatis; sed non vidimus dividere.*

Gærtner, by detecting the mistake of Linnæus, who had attributed a 4-seeded berry to Ixora, instead of one with only two seeds, has removed the supposed main distinction between that genus and Pavetta; but has notwithstanding kept the genera apart on other grounds. In the former he describes the cells of the fruit as lined by a particular membrane that parts them from the seed; the albumen as fleshy; and the rudiment of the future plant

as more than half as long as the whole seed: in PAVETTA the flesh of the berry as growing to the seed; the albumen as cartilaginous; and the rudiment of the future plant as less than half the length of the seed. The style seems, beside, to be proportionately longer in PAVETTA than IXORA.

The present species, of very general occurrence in the East Indies, was introduced by Sir Joseph Banks in 1790; but is yet extremely rare in our collections; and we know of no published figure taken from one cultivated on this side the tropic. Our drawing was made from a specimen which blossomed in March, in the hothouse at the nursery of Messrs. Lee and Kennedy, Hammersmith.

According to the author of the Hortus Malabaricus, the whole shrub seldom exceeds 3 feet in its native place. *Stem* upright, round, branched. *Leaves* spreading, distantly decussated, obversely oval, lanceolate, acuminate, farther tapered towards the petiole than towards the point, shining and smooth above, paler underneath, with a short close nap, nearly as fine as that on a peach: *stipules* between the *petioles* which they connect, close-pressed, sphacelately pointed; *panicles* rameous, terminal, loosely many-flowered, subcymously fastigiant, brachiate; *general peduncle* green, partial ones subdivided into shortly pedicled corymbules: *bractes* single, close-pressed, membranous, more or less hairy, upper ones nearly obsolete. *Flowers* white. *Germen* inferior, green, small, turbinately rounded, through a magnifier pubescent: *calyx* a shallow quadridenticulated rim continuous with the wall of the germen. *Corolla* hypocrateriform, $\frac{2}{7}$ of an inch long; tube subclavately filiform, slightly curved, bearded within the faux, nearly 3 times longer than the limb; segments recurvedly rotate oblong obtuse, villous at the foot within, and along a narrow central streak at the back, marked with a green spot at the ends. *Anthers* subsessile, long, sagittately linear, greenish while entire, inserted within the orifice of the tube, loosely reclined in the intervals of the segments; ash-coloured and twisted after they have parted with the sulphur-coloured *pollen*. *Style* an inch long, filiform, upright, smooth; *stigma* its green slightly clubbed villous continuation, compressed and rather broader at the summit, where it is marked by an open seam round the edge, as if of two pieces conjoined by their inner surfaces.

a Germen and calyx. *b* Corolla dissected vertically. *c* Pistil.

AMARYLLIS psittacina.
Parrot Amaryllis.

HEXANDRIA *MONOGYNIA.*

Nat. ord. Narcissi. *Jussieu gen.* 54. *Div. II.* Germ. inferum.
Amaryllideæ. *Brown prod.* 296. *Sect. I.* Rad. bulbosa. Flores spathacei, umbellati, raro solitarii.
AMARYLLIS. Suprà vol. 1. *fol.* 23.

Div. Bi-multifloræ. Tubus coronatus. Folia bifaria.

A. *psittacina*, biflora, subsemiringens; tubi membranâ brevissimâ bicolori denticulatâ: staminibus inclusis.

Bulbus *in collum productus.* Folia 7, *lorata, obtuso-acuminata, glauciuscula, unciam v. sesquiunciam transversa, erecto-divergentia.* Scapus (2 *successivi) bipedalis, cylindraceo-attenuatus, rotundatè anceps, basi crassitudine pollicis v. crassior, rubens.* Spatha *lanceolata, paulò longior pedunculis, pallidè rubescens.* Pedunculi *teretes, stricti, virides, crassitudine pennæ gallinaceæ minoris, duplo breviores floribus.* Germen *obscuro-virens, oblongum, rotundato-trigonum, semunciale v. circà.* Cor. *nutans, viridis, puniceo-picta, suprà reticulato-venosa, turbinato-campanulata, 5-uncialis, ab ipsâ base sensìm dilatescens, rictû semihiulco semipedem transverso patens:* lac. *cuneato-ovales, lanceolatæ, ad membranam faucialem usque imbricato-cohærentes, indè discretæ:* exteriores 3 *alternæ duplo latiores et aliquantùm longiores, brevitèr acuminatæ mucronatæ non tamen cum hamo, margine supernè undulatæ;* suprema *(ex exterioribus) depresso-porrecta, distantior,* 2 *uncias lata;* laterales 2 superiores *(ex interioribus) non multò unciâ latiores, oblongo-lanceolatæ, divaricato-dispansæ, sursùm subobliquantes;* laterales 2 inferiores *(ex exterioribus) cum summâ consentientes, imam versùs decurvo-obliquatæ;* ima *(ex interioribus una) omnibus angustior, ligulato-lanceolata, acuminata, declivis.* Corona faucialis *pro spatio unius unciæ à fundo distans, vix semilineam lata, viridi-punicea.* Fil. *subæqualia, parùm breviora imâ laciniâ, fasciculata, declinato-assurgentia, infrà virentia, medio albicantia, suprà rubentia:* anth. *obliquo-incumbentes, purpureæ,* polline *ochroleuco.* Stylus *inclusus, paulò longior aut crassior filamentis, filiformi-trigonus, puniceus:* stig. *ex* 3 *continuis coadunatis.* Flores *pulcherrimi, inodori.*

The present is the fifth unrecorded Amaryllis from the Brazils which has been published in this work out of the collection of Mr. Griffin. To have been the first to bring within the sphere of science and into culture an equal number of plants, belonging to a same remote region, of a same genus, and all interesting, either on the score of curiosity or beauty, within little more than two years, has probably never before been the chance of any single collector in Europe.

The bulb was sent about 3 years ago by Mr. E. Woodford,

from Rio Janeiro; and flowered in Mr. Griffin's hothouse at South-Lambeth in March last.

Bulb round, with a leafy neck. *Leaves* from upright spreading, about 7, lorate, obtusely pointed, faintly glaucous, an inch or an inch and a half broad. *Scape* (two in succession) about 2 feet high, cylindric, with 2 obsolete rounded corners, glaucous, purplish at the base. *Spathe* inclining to red, a little higher than the *peduncles;* these about half the length of the corolla, and about as thick as a small pen, round, straight. *Germen* oblong, obtusely 3-cornered, dark-green, about half an inch long. *Corolla* apple-green, bordered at the top with crimson, veined and partially streaked, nodding, turbinately campanulate, about 5 inches deep, widening gradually from the base itself, semiringent; *segments* obversely oval, lanceolate, cohering imbricately as far as the faucial membrane, thence detached; 3 *outermost* alternate, rather longer, and as broad again as the others, upwards undulate, short-pointed; *upper middle one* pointing forwards and depressed, farther apart, 2 inches broad; *upper lateral ones* but little more than an inch broad, longer pointed, slanting slightly upwards; *lower lateral ones* similar to the upper middle one, but slanting at the top with a curve towards the *lower middle one,* which last is the narrowest of all, and points downwards. *Faucial membrane* about an inch above the base, scarcely half a line broad, green and crimson, finely denticulated. *Filaments* not so long as the limb, fasciculate, deflectent, particoloured. *Anthers* obliquely incumbent, dark purple; *pollen* cream-coloured. *Style* red, but little longer than the stamens.

We did not perceive that the flowers, perhaps the most beautiful of this splendid genus, had any scent.

ANEMONE palmata.

Cyclamen-leaved Anemone.

POLYANDRIA *POLYGYNIA.*

Nat. ord. RANUNCULACEÆ. *Jussieu gen.* 231. *Div. I.* Capss. 1-spermæ non dehiscentes.

ANEMONE. *Cal.* 0: hujus loco involucrum caulinum à flore distans, 2-3-phyllum. *Pet.* 5, aut plura. *Anth.* filamentis adnatæ. *Germ.* receptaculo communi imposita; unicuique *stylus* unicus (persistens); *stig.* simplex. *Capss.* (seminiformia), in *Anemone T.* muticæ, in *Pulsatillâ T.* lanatæ aristatæ aristâ plumosâ. *Fol. radicalia* 1-2-*pinnata v. digitata v. simplicia lobata; scapi* 1-*flori foliolis involucri simplicibus v. partitis. A.* Hepaticæ *pet.* 6 *et involuc. flori proximum calyciforme* 3-*phyllum simplex. Scapi quarumdam intra involuc. umbellatìm ramosi, ramis simplicibus v. iterùm partitis et involucratis, apice* 1-*floris.* Juss.

Div. IV. Anemonoides *caule folioso seminibus ecaudatis.*

A. *palmata*, foliis cordatis 3-lobis, involucris 3-phyllis 3-fidis, corollis sub-10-petalis. *Vahl symb.* 3. 73.

Anemone palmata. *Linn. sp. pl.* 1. 758. *Hort. Kew. ed.* 2. 3. 338. *Willd. sp. pl.* 2. 1277. *Desfont. atl.* 1. 432. *Brotero lusit.* 2. 361. *Andrews's reposit.* 172.

Anemone latifolia Clusii. *Ger. emac.* 376. *f.* 6.

A. hortens. latif. simpl. flavo fl. I. *Clus. hist.* 249. *cum ic.*

Rad. *tuberosa, oblonga, verticalis.* Fol. 5-*plurave, radicalia, firmula, manducata acritèr mordentia, petiolata, rotundo-cordata v. reniformi-rotunda,* 3-*loba, villosa, crenulata,* 5-*nervia, subtùs venosa et sæpiùs purpurascentia; lobo antico minore, lateralibus ipsis obsoletè lobatis:* petioli *pilosiusculi suprà canaliculati et cum laminâ cucullato-continui.* Caulis *palmaris, subhirsutus, purpureo-fuscescens, simplex* 1-*florus, v. proliferus atque biflorus.* Invol. 3-*phyllum, sessile, patens, ciliatum;* foliolis *obversis* 3-*fidis, segmentis cuneatis trisecto-laciniatis.* Pedunc. *villis fulvis sericeo-hirsutus, longus.* Cor. *inexpansa cernua, indè erecta, imbricato-radiata,* 2 *uncias transversa, intùs aurea:* pet. 12 *ordine duplici, subcuneato-oblonga, angusta acumine obtuso brevi:* alterna exteriora *(calycina) sublongiora extùs sulphurea et pilis ferrugineis sericea;* interiora *(corollacea) extùs sulphurea nudiuscula.* Stam. *flava,* 3-*plo breviora corollâ basi receptaculi fructûs circumposita:* anth. *oblongo-didymæ, erectæ.* Pistilla *recept. elevato carnoso cylindraceo congesto-insidentia:* germ. *ovuliformia compressa ovato-rostrata, pilosa:* stylus *setaceus glaber flavus:* stig. *punctum acutulum.*

Native of Portugal, and of the coast of Barbary, about Algiers. By Gerarde's Herbal we find that it was cultivated here in 1597; yet it is far from being one of common occurrence in our collections. Although deemed hardy, it appears to succeed best when sheltered in the garden-pit during winter and spring. The drawing was made at the

nursery of Messrs. Lee and Kennedy at Hammersmith, from amongst several that flowered in April, and which had been newly imported from Lisbon.

Root tuberous, oblong, perpendicular. *Leaves* 5 or more, radical, substantial, biting when tasted, roundly cordate or sometimes approaching to reniformly orbicular, 3-lobed, villous, crenulate, 5-nerved, veined underneath, and usually purple; middle lobe smallest, lateral ones themselves obsoletely lobed: *petioles* thinly pubescent, channelled above, cucullately continuous with the blade. *Stem* about a span high, roughly pubescent, brownish purple, simple and oneflowered, or proliferous and twoflowered. *Involucre* at the base of the peduncle, triple-leafletted, sessile, spreading, ciliate; *leaflets* obverse, threecleft, segments cuneate with three incisions. *Peduncle* long, villous, hairs silky ferruginous close-pressed. *Corolla* before expansion drooping, opening upright, imbricately radiate, two inches over, of a golden yellow on the inside: *petals* 12 in 2 ranks, subcuneately oblong, narrow, with a short broad point: *alternate external ones* (calycine) rather the longest, sulphur coloured at the back and silky, the hair ferruginous; *internal ones* (corollaceous) of the same colour at the back as the others, but thinly pubescent. *Stamens* 3 times shorter than the corolla inserted round the receptacle of the fruit. *Pistils* numerous, closely set upon a fleshy cylindrically elevated receptacle, which they conceal: *germens* with the appearance of ovules, compressed, ovate, beaked, pubescent; *style* setaceous, smooth, deep yellow; *stigma* a simple point. *Capsules* like so many naked seeds; one-celled, monospermous, remaining unopened.

EPIGÆA repens.

Creeping Epigæa, or Ground-laurel.

DECANDRIA *MONOGYNIA.*

Nat. ord. Ericæ. *Jussieu gen.* 159. *Div. I.* Germen superum. Ericeæ. *Brown prod.* 557.

EPIGÆA. Cal. 5-partitus, caliculo 3-phyllo cinctus s. 3-bracteatus. *Cor.* hypocrateriformis, basi tubulosa, limbo patente 5-partito. *Stam.* non exserta, imæ corollæ inserta; *anth.* oblongæ. *Stigma* sub5-fidum. *Caps.* 5-loc., 5-valv., receptaculo 5-partito. *Suffrutex repens sempervirens; folia alterna; flores bracteolati, densè racemosi, axillares et terminales.* Jus. l. c. 161.

E. *repens*, ramis petiolis nervoque hirsutissimis, foliis cordato-ovatis integerrimis, corollis cylindricis. *Pursh amer. sept.* 1. 297.

Epigæa repens. *Lin. sp. pl.* 1. 565. *Mill. dict. ed.* 8. *n. Hort. Kew.* 2. 71. *ed.* 2. 3. 55. *Mich. bor.-amer.* 1. 250. *Andrews's reposit.* 102. *Willd. sp. pl.* 2. 615. *Lam. illustr. t.* 367. *fig.* 1. *Bigelow fl. bost.* 101.

Epigæa. *Lin. am. ac.* 3. 17. *Gron. virg. ed.* 2. 67.

Memæcylum. *Mitch. nov. pl. gen. XIII. in act. nat. curios.* 8. 213; *(non Mich. nov. gen. ac malè habet Willdenovius.)*

Arbutus foliis ovatis integris, petiolis laxis longitudine foliorum. *Gron. virg.* 49.

Pyrolæ affinis Virginiana repens fruticosa, foliis rigidis, scabritie exasperatis, fl. pentapetaloide fistuloso. *Pluk. alm.* 309. *t.* 107. *f.* 1.

Fruticulus *repens sempervirens ferrugineo-villosus,* caulis *alternè ramosus ramique teretes;* fol. *patentia, membranaceo-rigentia, cordato-elliptica v. ovata, obtusa cum mucronulo, villis rufis asperiuscula, immersè venosa, subtùs nitida, suprà viridi-rufa, modò biuncialia:* petioli *strictiusculi, hirsuti, teretes suprà canaliculati.* Racemi *axillares et terminales, congesto-pauciflori, raro* 1-*flori;* pedunculi pedicellique *brevissimi,* bracteis *subherbaceis, naviculari-subulatis, hirsutis, ad florem terminalem binis atque cum calyculo decussantibus, ad cæteros singularibus.* Calyculus *bifolius ad basin pedicelli ter brevioris glabri, bracteâ exceptus;* foliolis *oppositis ovato-lanceolatis, membrano-herbaceis, convexis, glaberrimis, cuspidatis, calycem partìm includentibus.* Flores *semunciales magìsve, odorem amariusculum non ingratum spirantes.* Cal. *connivens, basi intrusus,* foliolis *calyculi similibus, subminoribus, planioribus.* Cor. *carneo-albicans:* tubus *cylindricus calyce limboque fermè duplo longior, intùs albo-lanatus:* lac. limbi *æquales, oblongo-ovatæ, glabræ.* Stam. *tubo subemicantia:* fil. *corollæ fundo inserta, basi pilosiuscula:* anth. *erectæ adnatæ, dithecæ, lineares, introrsùm sublunulatæ indèque rimis* 2 *longis dehiscentes, dorso fusco-carinatæ:* pollen *grumosum, ochroleucum.* Germ. *albo-hirsutum, disco crasso virente* 10-*dentato insidens:* stylus *columellari-filiformis, æquans stamina, virens, glaber:* stig. 5-*dentato-obtusum.*

A small trailing evergreen shrub found in the shade of forests from Canada to Carolina, and known in some parts of the United States by the name of "Ground-laurel." Introduced into England by Mr. Peter Collinson, in 1736.

Thrives best on a border of peat-earth in a sheltered shady situation; where it flowers from May to July, or longer. Some of the corollas are frequently found to be sterile; and, according to Michaux, it would appear that the species was diœcious, the flowers being sometimes barren throughout in individual plants.

Stem recumbent, slender, round, branched, ferruginously villous. *Leaves* patent, hardish, membranous, elliptic with a cordate base, or ovate, obtuse with a small point, covered with a harsh russet pubescence, impressedly veined, shining beneath, russet-green above, sometimes nearly two inches long: *petioles* pubescent, channelled, firm. *Racemes* both axillary and terminal, crowdedly fewflowered, seldom one-flowered; *peduncles* and *pedicles* very short; *bractes* subulate, hirsute, two to the upper flower, and placed crosswise with the leaflets of the calycle or outer calyx, one to the other flowers. *Calycle* two-leaved within the bracte and at the base of the pedicle, leaflets opposite ovate lanceolate cuspidate, smooth, membranous, inclosing the lower part of the calyx by their tops. *Flowers* about half an inch long, or rather more, diffusing a pleasant bitterish smell. *Calyx* connivent, dinted at the base; *leaflets* like those of the calycle, but rather smaller and flatter. *Corolla* white and flesh-coloured; *tube* cylindrical, twice the length of the calyx and the limb, white-bearded within; *segments* equal, oblong-ovate, smooth. *Stamens* just peering from the tube. *Filaments* inserted in the bottom of the corolla, subpubescent at the base. *Anthers* upright, adnate, bilocular, linear, bent slightly inwards to the form of a crescent, and opening in that direction by a long double fissure, keeled and brown at the back: *pollen* grumous, cream-coloured. *Germen* covered with white shaggy pubescence, placed on a thick green tenfold indented disk: *style* a filiform shaft, equal to the stamens, green, smooth: *stigma* obtuse, quintuply indented.

The drawing made from a plant sent in April by Messrs. Bassington and Hockley, Kingsland Nursery.

a Bracte, calycle or under calyx, and calyx. *b* Corolla dissected vertically. *c* Pistil and hypogynous disk.

Syd. Edwar.

ORCHIS longicornu.
Long-spurred Orchis.

GYNANDRIA *MONANDRIA.*

Nat. ord. Orchideæ. *Jussieu gen.* 64. *Brown prod.* 309.
Div. I. Anthera adnata subterminalis persistens. *Pollinis massæ* è lobulis angulatis elasticè cohærentibus; basi affixæ. *Brown in Hort. Kew. ed.* 2. 5. 188.
ORCHIS. Cor. ringens. *Labellum* basi subtùs calcaratum. *Glandulæ* (1-2) pedicellorum pollinis inclusæ cucullo unico. *Br. loc. cit.*

O. *longicornu*, labello trilobo crenulato, lobis obtusis, medio breviore, petalis obtusis conniventibus, cornu ascendente compresso spathulato germen subæquante. *Willd. sp. pl.* 4. 19.
Orchis longicornu. *Poiret voy. en barb.* 2. 247. *Lamarck encyc.* 4. 591. *Desfont. atl.* 2. 317. *t.* 246.

Rad. *didymo-tuberosa.* Fol. *immaculata, radicalia, plurifaria, basi imbricato-compacta, indè patentia,* 5-6, 3-*uncialia,* ¼ *partes unciæ lata, lanceolata, micaceo-pruinosa, medio canaliculata, distantiùs lineata; caulina* 4-5, *vaginantia.* Caulis *scapiformis bis altior foliis, supernè purpurascens.* Flores *laxi, patentes,* 10 *v. plures, violaceo-purpurei, cum germine simul subunciales, odore grato amaricante fragrantes, resupinato-explicantes.* Bracteæ *vaginantes, coloratæ, lanceolatæ, breviores germine.* Petala *ordine duplici; 5 (ex resupinatione) superiora galeato-conniventia, rosea, intùs pallentia, obtusa, bìs terve breviora calcare; trium* exteriorum lateralia *obliquata, inæquilateri-elliptica, nervis 5 viridantibus, carinâ eccentricâ;* medium *oblongum antrorsùm fornicatum trinerve;* interiora *extimis-accumbentia, angustiora, invicèm approximata.* Labellum *dimidio longius istis, oblatum, porrectum, disco pallescens punctis atropurpureis, 3-lobum lobis lateralibus obscuro-coloratis externo margine denticulatis, intermedio admodùm minore sæpiùs retuso:* calcar ⅔ *unciæ longum, subæquale germini, assurgens, roseo-punicans, transversè compressum, cuneato-elongatum, truncatum, erugatum, quandòque retusum.* Germen *fusco-purpureum,* ¾ *partes unciæ longum, pro flore resupinando tortum, suprà curvatum.* Massæ pollinis *stipitato-clavatæ, indivisæ, thecis 2 marginalibus cuculli erecti inclusæ, stipites septo incompleto perpendiculari intergerino albo duplicato distincti:* pollen *virens, graveolens.*

A species very recently introduced by Mr. William Swainson from the Botanic Garden at Palermo. Native of the coast of Barbary, and probably of Sicily. Found by Messrs. Poiret and Desfontaines in swamps near the sea. The latter has published an engraving of it in his celebrated Flora Atlantica, but from a dried specimen.

It comes very close to our own common Meadow Orchis (*Morio*), but the leaves are more numerous, the flowers

larger and brighter and very fragrant; the spur is longer in proportion, flat, and truncate; the two outside petals are not so green, the bractes are much shorter than the germen, and the side lobes of the labellum reflectent. There seem to be other differences; but not having a fresh plant of *Morio* at hand, we cannot rely with confidence on our view of them.

The drawing was made at the Chelsea Garden, where the species of this tribe, generally reputed as scarcely to be reclaimed to culture, are treated by Mr. Anderson with as much success as those of any other vegetable family. Among many plants of this species which flowered at the same time, we perceived several varieties. The two we have represented in the plate seemed to be, however, the extremes of the variation; the detached flower being that which receded the farthest from *Morio*.

Root of twin tubers. *Leaves* unspotted, *radical ones* 5-6, multifariously patent, scarcely 3 inches long, lanceolate, chagreened with minute crystalline papillæ, flat, channelled down the middle, with distant lines; *cauline ones* 4-5 sheathing. *Stem* twice as high as the leaves, purple upwards. *Flowers* 10 or more, in a loose spreading spike, violet-purple, very fragrant, about an inch long including the germen, when open resupinate. *Bractes* coloured, sheathing the much shorter germens. *Upper lip* of the open corolla pentapetalous, convergent, vaulted; *petals* in two ranks, all pale purple, obtuse, 2 or 3 times shorter than the spur, the lateral ones of the three outermost marked with five greenish nerves, elliptic with unequal sides, the middle one oblong pointing forward arched 3-nerved; *two innermost* narrower, convergent, overlaid by the others. *Label* half as long again as these, broader than long, pointing forwards, paler along the middle, where it is spotted with dark purple; 3-lobed, side-lobes dark-purple rounded outwards and denticulate, middlemost a great deal smaller, generally retuse: *spur* about ⅔ of an inch long, about equal to the germen, assurgent, rose-purple, horizontally compressed, cuneately linear, truncate, unwrinkled. *Germen* brownish red, ¾ of an inch long bent towards the top. *Pollen-masses* 2, clavate, pedicled, undivided, enclosed within the two marginal cists of the headpiece of the *column* formed by the filaments and style, separated above their glandular base by an incomplete upright white bilaminar partition.

BROMELIA nudicaulis.

Scarlet Bromelia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. BROMELIÆ. *Jussieu gen.* 49. *Div. II.* Germen inferum.

BROMELIA. Cal. et *Cor.* tubulosi, *ille* brevior (firmior) trifidus, *hæc* longior tripetalo-partita (tenerior) laciniis ungue appendiculatis. *Stamina* imo (*Jussæo malè* summo) calyci inserta, aut glandulæ calycinæ supra germen productæ (indè quasi epigyna?). *Bacca* umbilicata polysperma. *Plantæ herbaceæ, quædam parasiticæ; folia radicalia canaliculata, marginibus sæpè dentato-spinosis; flores* Bromeliæ *Plum^ri. in scapo vel caule laxè spicati aut paniculati, fructibus vix baccatis; flores* Karatæ *Plum^ri. densè corymbosi, corymbo radicali, baccis ovatis; flores* Ananassæ *Plum^ri. densè spicati in scapo suprà folioso, spicâ maturescente strobiliformi carnosâ squamosâ eduli, è coadunatis concreta baccis, vix loculosis et malè fœcundis.* Jussieu gen. 50.

B. *nudicaulis;* caule simplici spathaceo-bracteato; spica cylindracea, ebracteata, laxiùs imbricata.

Bromelia nudicaulis. *Linn. sp. pl.* 1. 409. *Willd. sp. pl.* 2. 9.

Bromelia pyramidalis. *Curtis's magaz.* 1732.

Bromelia pyramidata, aculeis nigris. *Plum. nov. gen.* 46. *Ic.* 51. *tab.* 62.

Caudex nucleus brevis basi stoloniferus. Folia *multifaria, infernè se invicem convoluto-complectentia, indè divergentia, loràto-lanceolata cuspidata glabra basi purpurascentia margine dentato-spinosa dentibus ustulato-nigricantibus, longiora 14-15-uncialia latitudine parùm infra triuncialem.* Caulis *simplex, subsesquipedalis, strictus, crassitudine digiti, subflexuosus, albo-farinosus, cylindraceus, tectus* bracteis *erectis spathaceis sparsim imbricantibus semiamplexicaulibus membranosis obsoletè rubidis lanceolatis 3-4-uncialibus, superioribus latioribus confertioribus integerrimis spicam partìm comprehendentibus.* Spica *terminalis, simplex, sparsa, cylindrica, imbricato-multiflora, erecta, semipedalis ultràve, ebracteata,* pedunculus *copiosè farinosus albus strictus carnosus pro sedibus florum undique emarginatus.* Flores *erecti, sessiles, 2 uncias cum dimidio longi, coccinei apice violacei, inodori.* Cal. *corollæ concolor farinâ albâ opacatus, 3-partitus, crassus, rigens, imbricato-tubulosus, in fundo nectariferus, plus quàm duplo brevior corollâ cui arctè adaptatur;* segmentis *æqualibus, oblongis, obtusulis.* Cor. *biuncialis, tripetaloidea, fundo calycis alternè cum segmentis imposita, tubuloso-convoluta, suprà brevè patula;* laciniæ *subpandurato-ligulatæ, acuminatæ, infra medium intra latera liris membranosis (squamarum continuationibus) 2 longitudinalibus filamenta intercipientibus sulcatæ.* Squamæ 6 *convexæ cum filamentis alternæ, membranosæ, imo calyci a parte concavâ affixæ, margine lacinulatæ, sertulum æquabile efficientes.* Stam. *æqualia, inclusa, erecta:* fil. *inserta basi calycis, alba, filiformia:* antheræ *luteæ, versatiles, obliquè incumbentes, lineari-sagittatæ, latere utroque dehiscentes.* Germ. *album, farinosum, hexagono-cylindraceum, 3plo brevius corollâ, calyce parùm angustius:* ovula *numerosa angulis internis loculamentorum ordine congesto multiplici appacta, ovato-rostrata;* stylus *albus, tristriato-filiformis, non excedens corollam, nequè crassior filamentis:* stigmata 3, *violacea, in unum spirale oblongum contorta.*

The germen being here completely inferior, affords the technical distinction which separates the genus from its next coordinates, Tillandsia and Pitcairnia, where that is either partly or else wholly superior. In Bromelia the germen ripens into a more or less fleshy succulent pericarp, which not opening by valves, falls within the definition of a berry. In the well-known species *Ananas*, it is a concreted cluster, or rather spike of these berries (in that instance supremely succulent and generally seedless), horizontally imbedded with the bractes in their common harder fleshed peduncle or stalk, the core of the mass, which compounds the Pine-Apple. In *nudicaulis* the berries are thinner fleshed, scarcely succulent, do not coalesce, and are not esculent; the bloom alone giving a value to the plant in the garden.

Caudex a short stoloniferous axis. *Leaves* radical, growing much as in the common Pine-Apple plant, convolutely folded and imbricated at the base, where they are stained on the inside with purple, divergent, lorately lanceolate, cuspidate, smooth, spinously dentate with teeth of a burnt-black colour, outer ones largest, from 12 to 15 inches in length, and little more than three in breadth. *Stem* simple, about a foot and a half high, upright, of about the thickness of a finger, very slightly flexuose, covered with a white mealy efflorescence, cylindrical, sheathed by large single upright scattered imbricating spathelike *bractes* of a dull pink colour half stemclasping; membranous, lanceolate 3-4 inches long, upper ones broadest, closest, quite entire, and envelopping the lower part of the inflorescence. *Spike* terminal, simple, scattered, cylindrical, imbricately many-flowered, upright, half a foot or more in length, bracteless: *stalk* or *peduncle* mealy white, fleshy, rigid, cut into niches to hold the flowers. *Flowers* upright, sessile, about two inches and a half long, scarlet, with a violet-blue stain at the end of the segments of the corolla, scentless. *Calyx* nearly of the colour of the corolla, powdered with white meal, 3-parted, thick, hard, imbricately tubular, twice shorter than the corolla, which it envelops closely, filled with a honeyed lymph in the bottom; segments equal, oblong, somewhat obtuse. *Corolla* two inches long, of three petal-like segments, placed alternately with those of the calyx at the base of that, tubularly convoluted, slightly spread above: *segments* subpanduriformly ligulate, acuminate, below the

middle within the sides divided longitudinally by two membranous ridges in the grooves between which the filaments are placed. *Scales* 6, convex, alternate with the filaments, membranous, affixed circularly to the lowest part of the interior of the calyx by their concave side, jagged at the rim. *Stamens* equal, enclosed, upright: filaments inserted at the bottom of the calyx, white, filiform: *anthers* yellow, veering, slantingly incumbent, linear-sagittate, opening on each side. *Germen* white, mealy, cylindrical, hexagonal, 3 times shorter than the corolla, of a circumference little less than that of the calyx: *ovules* numerous placed in crowded multiplied rows along the corners of the loculaments, ovate, beaked: *style* white, filiform with three streaks, higher than stamens, but not overtopping the corolla, nor thicker than the filaments: *stigmas* 3, twined into an oblong spiral one, of a violet-blue colour.

A native of the Brazils. Introduced about three or four years ago from Rio Janeiro by Mr. Rose; and cultivated in his hothouse at Cuffnels in Hampshire. It requires to be kept in the bark-bed, where it flowers in March and April. Puts out numerous suckers, by which it is easily multiplied. Like the rest of its kindred, the leaves retain water in considerable quantity in the folds at their bases. Mr. Edwards was favoured with the specimen from which the drawing was made by the Duchess of Athol, on whose application to Mr. Rose he was supplied with one of the largest outer leaves, which illustrate the character attributed by Plumier to the spines at the margin, and which is not so perceptible in the inner ones. Differs from all its congeners that we are acquainted with, in having an entirely bracteless inflorescence.

A diminished outline of the flower-stem below the spike.
The flower opened vertically, on a vertical section of its germen.

TULIPA oculus-solis.

Agen Tulip.

HEXANDRIA *TRIGYNIA; (Nobis.) MONOGYNIA; (aliis).*

Nat. ord. Lilia. *Jussieu gen.* 48.

TULIPA. *Flores* solitariò terminales, ebracteati; sæpè unicus. *Cor.* infera, hexapetalo-partita, regularis, subæqualis, decidua. *Fil.* immediatè hypogyna. *Stylus* 0: *stig.* summi germinis cornua tria bilobo-dilatata replicata secundùm marginem inferiorem canaliculato-cohærentia. *Sem.* numerosa, plana, biseriato-cumulata; *albumen* cartilagineum; *testa* fusca.

Bulbus *acuminatus, base obliquâ, integumento membrano-crustaceo, nucleo solido-carnoso: post maturatum fructum alios enixus frugiferos, emoriens.* Fol. 3-4, *interiora caulina.* Caulis *herbaceus, teres, rariùs divisus.* Fil. *robusta, erecta, subulata, ex apice tenuissimo setaceo elastico inserta foramini ad basin antherarum:* anth. *lineares, perpendiculares, tremulæ.* Caps. *ovato-3-gona, 3-loc., 3-valv.: valvis medio septigeris; dehiscentia suprà ab introrsùm. A confini* Melanthio *ægrè distinguenda; nec differt nisi seminibus planis, stigmatibus crassioribus brevioribus, floribusque solitariò terminalibus.*

T. *oculus-solis,* integumento bulbi intùs lanato, foliis 4 subciliatis, caule floreque glaberrimis, labris conniventibus stigmatum villoso-fimbriatis.

Tulipa oculus-solis. *St. Amans in rec. soc. d'agr. d'agen.* 1. 75. *Redouté liliac.* 219. *Lam. & Decand. fl. franç.* 3. 200.

Tulipa agenensis. *Red. liliac.* 60 *in textû.*

Tulipa flore rubro. *Garid. prov.* 475.

T. bombycina fl. rubro. *Park. parad. t.* 51. *f.* 1.

Folia *glauciuscula, pilis tenerrimis ciliata, radicale ovato-lanceolatum, latum.* Caulis *uniflorus.* Flos *è majoribus, inodorus.* Cor. *rubra, campanulata infrà rotunda, intùs oculo magno nigro-cæruleo circulo aureo cincto e fundo splendescens;* laciniæ *ellipticæ,* exteriores *longiores, planiores, acuminatæ, extùs pallidiores et opacæ, apicibus patulis:* interiores ¼ *parte angustiores, concavæ, utrinque nitidæ, apice rotundatæ incurvulæ.* Stam. *fuliginosa, subæqualia germini:* fil. ⅓ *parte breviora* antheris. Stig. *parùm revoluta.* Germ. *obsoletè rubens.*

Tulipa and Melanthium stand in the nearest degree of affinity to each other; the latter genus being distinguished chiefly by round seeds, narrower stigmas, and a multiplicate inflorescence. The two genera, since pared from Melanthium, under the names of Wurmbea and Ornithoglossum, in our view, can only serve as burlesques of refinement.

Linnæus had enumerated three species of Tulips. Their number now amounts to 10, after the reduction of

breyniana to Melanthium. Several species had been confounded as mutual varieties in *gesneriana.*

Our plant is a native of the South of France, Savoy, Piedmont, and other of the northern parts of Italy. It differs from *gesneriana* in having the outer segments of the corolla flat and pointed, the inner shorter, narrower, and rounded, but especially in having stigmas less revolute, not widely channelled, and without the white corrugated cartilaginous border, so conspicuous in those of the other. The outer covering of the bulb is lined throughout with a woolly pubescence. *Stem* undivided, one-flowered, and quite smooth. *Leaves* four, subglaucous, softly ciliated, radical one ovately lanceolate and very broad. *Flower* upright, scentless, about two inches deep. *Corolla* campanulate, broadly rounded at the base, red, with a large blueish-black eyelike orb, surrounded by a narrow gold-coloured circle at the bottom within, from whence it has obtained in Italy the title of *Occhio di Sole,* of which the present specific name is intended as the version. *Segments* elliptic; *outer* largest, flattest and pointed, externally of a paler opaque red, internally shining, spreading at the points; *inner* about ¼ narrower, shining on both sides, concave, rounded at the ends. *Stamens* about equal to the germen; *filaments* nearly a third shorter than the anthers, into the perforated bases of which they are inserted by slender setaceous elastic points. *Germen* faintly red; *stigmas* slightly reflectent, finely ciliated at their margins. It comes the nearest of any species to *gesneriana,* the common garden Tulip, a native of the borders of the Caspian Sea.

The drawing was taken in April from a plant lately received from Paris, by Messrs. Whitley, Brames, and Milne, of the Fulham nursery.

The Tulipa *biflora* of Russian Tartary is at present wanting in our collections; but has been noticed and figured in some of the oldest botanical records in this country. We have seen spontaneous specimens of it in Mr. Lambert's Herbarium.

OPHRYS tenthredinifera.

Saw-fly Ophrys.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. *Jussieu gen.* 64. *Brown prod.* 309.

Div. I. Anthera adnata subterminalis persistens. *Pollinis massæ è* lobulis angulatis elasticè cohærentibus; basi affixæ. *Brown in Hort. Kew. ed.* 2. 5. 188.

OPHRYS. Cor. subpatens. *Labellum* ecalcaratum. *Glandulæ pollinis* cucullis distinctis inclusæ. *Id. l.* c. 195.

O. *tenthredinifera*, caule folioso, labello villoso obovato bilobo appendiculato, petalis patentibus, 3 exterioribus oblongis obtusis, binis interioribus brevissimis. *Willd. sp. pl.* 4. 64.

Ophrys insectifera. *var.* A. *rosea. Desfont. atl.* 2. 320.

Ophrys villosa. *Desfont. in ann. du Muséum* 10. 225. *t.* 14.

Orchis orientalis, fucum referens, flore parvo, villosissimo, scuto azureo. *Tournef. cor. inst.* 30. *Vélins du Muséum.*

Tuber *didymum, indivisum.* Folia *subtùs lineata, radicaliâ*-4-5, *elliptico-lanceolata, subtriuncialia, latiora unciam ferè transversa; caulina angustè lanceolata vaginantia.* Caulis *ferè duplo altior.* Spica *laxa* 3-8-*flora.* Bracteæ *pallido-carneæ lineis viridibus, convoluto-lanceolatæ, erectæ,* germen *semunciale viride tortum curvatum superantes.* Cor. *nutans, cruciato-ringens, subpatens rictû subunciali:* pet. 5 *lilacino-rosea,* 3 exteriora *distantia, isometra, glabra, obtusa, nervo medio carinata, medium erectum ellipticum fornicatum, lateralia ovato-elliptica patentissima horizontalia: 2 interiora istis alterna minima angulari-ovata intùs tomentosa, summæ columnæ acclinia:* labellum *dependens, amplum, subpandurato-obcordatum, bilobo-retusum acuminulo terminali crasso rigido uncatìm infracto, intùs sericeum at gibbo medio hirsutiùs ac si barbatum, viridi-luteum, convexum, margine depressum, pictum maculâ magnâ pectoraliformi castaneâ suprà includente alteram scutiformem polyedram glabratam cyaneam albo iridiatam ipsam continentem cum glandulâ elevatâ thoraciformi rubro-fuscâ splendenteque.* Columna *anticè fornicata, margine flavo villoso ad utrumque latus antheræ ocello nigro notato.* Cucullus antheræ *dithecus rostrato-terminalis erectus virens compressus aduncus thecis 2 collateralibus anticè fenestratis.* Pollinis massæ *flavæ erectæ clavatæ, stipite longiore capitello.*

Many species in this genus recall forcibly the images of various insects, as flies, bees, spiders, &c.; of which we have instances in the few indigenous ones of our own country. The present is a native of the Coast of Barbary, the Levant, and probably of Sicily, having been lately introduced from the botanic garden of Palermo, by Mr. William Swainson. In the Flora Atlantica it is included among the varieties of the *insectifera* of Linnæus, but now stands distinct, as well as the others of that promiscuously

combined species. What has suggested to Willdenow the resemblance of its flower to any of the Saw-flies, we cannot guess, as he does not appear to have seen either figure or specimen. The synonym from a later publication by Prof. Desfontaines we have added upon our own judgment.

Tubers twin, undivided. *Lower* leaves 4-5, elliptically lanceolate, about 3 inches long, upper 2-3 narrowly lanceolate, convolutely folded upright. *Stem* about twice their height. *Spike* loose, 3-8-flowered. *Bractes* of a faded pink-colour with green lines, upright, lanceolate, folding round the germens which they overtop. *Corolla* nodding, cruciformly ringent, rather spreading, nearly an inch from top to bottom; *petals* 5, pink; *exterior* 3 of one length, standing apart, smooth, obtuse, green-keeled, middle one of these upright elliptic vaulted, side ones horizontally extended; *interior* 2 alternate, diminutive, tomentose at the inner surface, inclining over the column. *Label* broadly obcordate, contracted above the base, bilobedly retuse with a small intermediate fleshy rigid flat-pressed turned-up point; on the inner surface greenish yellow, covered with a velvet-like pubescence, marked with a large chestnut-coloured stain, comprehending at the base a smaller smooth polyedrously scutiform one, edged with white and surmounted by a reddish brown fulgid glandular prominence, resembling the thorax of some species of insect. *Anther* in two distinct cells, terminal, upright, compressed, narrow, rostrate, crooked; *cells* adjacent, open in front; *pollen-masses* with a separate glandular base to each; not as in Orchis with a glandular base common to both. Mr. Brown observes, that both genera, as now defined, are wholly extratropical, and confined chiefly to Europe.

CANNA gigantea.

Tall Indian Reed.

MONANDRIA *MONOGYNIA.*

Nat. ord. CANNÆ. *Jussieu gen.* 62. CANNEÆ. *Brown prod.* 307, *in obs. III.; ubì à* SCITAMINEIS *distinguitur.*

CANNA. Anth. simplex, margini filamenti petalodis affixa. *Stylus* spathulatus adnatus tubo corollæ: *stig.* lineare. *Caps.* 3-loc., 3-valv.: *sem.* plura. *Roxb. in asiat. research.* 11. 322; *(Calcutta edit.).*

Rad. *tuberosa, repens.* Caulis *herbaceus petiolis vaginantibus tectus.* Fol. *alterna vaginantia, juniora convoluta, è nervo medio simplici emittentia utrinque nervos parallelos.* Flores *laxè spicati terminales.* Juss.

C. *gigantea,* limbo interiore semicirculari-4-radiato reflexo-patente, lacinia ima dextrorsùm obliquata inæquilobo-retusa; filamento longè ultra antheram producto recurvatoque.

Canna gigantea. *Redouté liliac.* 331.

Canna patens. *Rosc. in trans. linn. soc.* 8. 338? *judicantes ex nuperiùs dictis ab eodem in vol.* 10. *p.* 272 *operis citati; at certè non* Canna indica δ. patens, *edit. prioris Hort. Kew.,* C. patentis *jure archetypum; cujus specimen extat in Herb. Banks.*

Rhizoma *tuberoso-carnosum, bulbiceps, stoloniferum.* Caules 3-4-*pedales. Vaginæ radicales et petioli vaginosi cuticulâ arachnoideâ deciduâ albâ obducti.* Fol. *majora laminâ modò* 2-*pedali, elliptico-v. ovato-lanceolatâ, cuspidatâ.* Racemus *spicatus, multiflorus, distans, floribus sæpiùs geminis:* pedunc. *longiores germine,* bracteâ *aridâ fuscâ ad singulos.* Germ. 3-*gono-rotundum.* Cal. *semuncialis v. ultrà, subcoloratus, farinosus,* 3-*partitus, persistens, segmentis hinc distantioribus,* 1 *submajore.* Cor. *tubuloso-divisa, ultra tubum duplex,* 3-*uncialis, miniato-coccinea, immaculata*; tubus communis *brevis*; limbus exterior *sesquiuncialis, nitens,* 3-*partitus, erecto-connivens regularis, laciniis linearibus lanceolatis striatulis involuto-concavis, fissurâ anticâ profundiùs divisis:* interior *intensiùs coloratus, opacus,* 4-*partitus,* 2 *uncias cum dimidio altus, laciniis pro longitudine limbi exterioris imbricato-cohærentibus nisi ad ventrem ubi* 4ta. *hinc à proximâ sinistrâ ad tubum communem usque soluta est, omnibus in labium supernum obliquantibus,* 3 *similibus subæqualibus lanceolato-spathulatis,* 4ta. *inferiore subdifformi saturatiùs coloratâ, non ut plerùmque oppositâ filamento neve latere dextro longiùs à proximâ divisâ ac aliæ invicèm inter se.* Fil. *adnatum limbo interiori sub labio ad ejusdem divisuras usque, latius laciniis, antrorsùm inclinatum, ligulato-lanceolatum, obtusum.* Stylus *aurantiacus lineari-spathulatus à plano adnatus faciei lateris sinistri filamenti, lucidus, crassiusculus, de paulò infra antheram solutus, margine sinistro rectiore:* stigma *apex continuus luteus glandulosus puberulus subtruncatus subæqualis antheræ.*

It has been the lot of several species of this genus to have been ranged in the various systems of vegetables, by characters too vague or too scanty to ensure them from obscurity and uncertainty. By a passage in the observations

of Mr. Roscoe on the *Scitamineæ* of Dr. Roxburgh, we are induced to believe that he has intended the present plant by Canna *patens*: if so, he has had in view quite another species from the Canna *indica* (δ) *patens* of the first edition of the Hortus Kewensis, which was generally presumed to have been the type of his species. In that the fourth inner segment or nectary is described as revolute, of a yellow colour, besprinkled with small red lines, and is besides different, both in form and position, from that of the present, as may be seen by the original specimen in the Banksian Herbarium. *Gigantea* is of much later introduction into our collections.

Stems several, 3-4 feet high or more. Radical sheaths and sheathing petioles, skinned over by a white araneous deciduous film. Larger *leaves* sometimes two feet or more in length, elliptically or ovately lanceolate, cuspidate. *Raceme* loosely spiked, flowers generally in pairs: *peduncles* longer than the germen, with a brown dry *bracte* to each. *Calyx* persistent, half an inch or more in depth, faintly coloured, powdered, 3-parted, segments further separated at one side, one rather larger than the rest. *Corolla* tubular, cleft, double above the tube, 3 inches long or more, scarlet without spots: *common tube* short, narrowly turbinate or obconic, filled with a honied lymph: *outer limb* an inch and half long, glossy, tripartite, erectly and regularly convergent, segments linearly lanceolate, streaked, involutely concave, front fissure deepest: *interior limb* more deeply coloured and opaque, 4-parted, 2 inches and a half deep, *segments* cohering imbricately for the length of the outer limb, except in front, where the fourth is disunited on one side from the next, over which it laps down to the common tube, all converging into an upper semicircular reflectent lip; 3 similar, nearly equal, ligulate, spatulate, lanceolate, somewhat pointed; the fourth and lowermost slanting away towards the next on its right, of a somewhat different form, deepest coloured, irregularly retuse, not placed opposite to the filament, nor adnate to the base of that, nor parted deeper on the right side from the rest, than they from each other, as is most usual in the genus. *Filament* revolute at the top: *anther* placed far below the apex of the filament.

Flowers in February. A stove plant. When, whence, or by whom introduced, we have not yet learned. The draw-

ing was taken at Messrs. Whitley, Brames, and Milne's Nursery, Parson's Green.

A diminished figure of the whole plant. The stamen and pistil as they appear, after the removal of the outer limb, and the abscission of the 4 segments at the point where they divide; the lower fissure purposely dilated. The outer limb and tube. The germen and calyx.

Sydᵈ Edwards del

Pubᵈ by Ridgway & Sons, July 1. 1817.

Thus sc 24 Brownlow St

EUCROSIA bicolor.

Particoloured Eucrosia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.*
AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I.*

EUCROSIA. *Flores* umbellati in scapo terminales; *spatha* plurivalvis, brevior. *Cor.* supera, infundibuliformis, subringens, nutans: *tubus* brevis, obliquus, coronatus: *limbus* 6-partitus, anticè ventricosior. *Fil.* ori tubi inserta, declinata, exserta, monadelpha v. infra medium in cylindrum posticè sinû oblongo profundo interruptum submembranoso-connexa. *Stylus* staminibus æqualis, decurvatus: *stig.* apex plano-obtusatus, puberulus: *germ.* 3-loc., *ovulis* plurimis biseriatis in loculamentis singulis.

Bulbus *tunicatus, ovatus.* Fol. *plura, multifaria, petiolata, laminâ lanceolatâ, semipedali, latitudine* 1-2-*unciali, nitidâ, tenerâ, subtùs pallidâ, unicostatâ.* Scapus *strictus, teres, compressus, lævis, pennâ ordinariâ gracilior, viridis, fistulosus.* Spatha 4-*flora,* 4-*valvis, arida, erecta, foliolis angustis acuminatis.* Pedunculi *virides, stricti, subsemiteretes, inæquales, longiores vix sesquiunciales.* Germ. *nitens, viride, ellipticum, trilobo-trigonum angulis obtusis.* Cor. *parùm superans unciam, miniata apicibus viridibus, persistens:* tubus *viridissimus, brevior crassiorque germine, rotundatè hexagonus, nectariferus, ore bullatus glandulis 6 plano-convexis subovatis singulatìm à margine basium sub pedibus filamentorum (non alternè cum iis) affixis:* limbi laciniæ *lanceolatæ, interiores planiores undulatæ, virore parciùs notatæ, exteriores firmiores acutiores subhamato-mucronatæ.* Fil. *alba, subduplo longiora limbo, suprà patentia, denuò de ventre deflorescentis corollæ procidua; posteriora* 2 *reliquis longiùs separata;* anth. *virentes, versatiles, lineari-oblongæ.* Stylus *albus,* 3-*quetro-filiformis, rigidior subcrassiorque filamentis, cylindro stamineo vaginatus. Differt* AMARYLLIDE *staminibus monadelphis,* PANCRATIO *ex tubo stamineo deflexo vix membranoso et per hiatum definitum ad latus posterius interrupto: utrisque ob corpuscula basibus filamentorum subtensa, substantiâque teneriore et molliore foliorum.*

Eucrosia *bicolor.*

A very curious unpublished plant, not strictly reducible to any established genus, and appearing to us of sufficient diversity in character and habit to found a new one. It differs from AMARYLLIS in having monadelphous filaments, and from PANCRATIUM by a deflectent nearly webless hollow stamineous cylinder, broken at the upper side by a deep oblong sinus; from both genera by six glandular corpuscles subtending the bases of the filaments, not alternating with them like the scales in some AMARYLLIDES, and by a tenderer and softer foliage.

We are indebted to Messrs. Lee and Kennedy of the Hammersmith nursery for the specimen from which the drawing was made, by whom we are informed that it is native of South America. Not very tender, but will thrive in a well secured garden-pit, where it flowers about the end of May. Some of the particoloured Peruvian PANCRATIUMS seem to be the nearest allied to it of any vegetables known to us.

We had no opportunity of inspecting the bulb which produced the flower; the one represented is an offset from that. *Leaves* multifarious, petioled; blade lanceolate, about six inches long, 1-2 broad, apple-green, bright, tender, pale underneath, midrib keeled. *Scape* not so thick as a common pen, green, round, compressed, upright, fistular. *Spathe* 4-flowered, leaflets 4, narrow, acuminate, sphacelate. *Peduncles* of different lengths, longest about an inch and half high, straight, green. *Germen* green, bright, elliptic, trigonally lobed, corners obtuse, trilocular; *ovules* in two ranks, many in each loculament. *Corolla* scarcely exceeding an inch in length, salmon-coloured, with green points, superior, persistent, scentless, funnelform, subringent, nodding; *tube* green, oblique, shorter than the germen, roundedly hexagonal, crowned at the orifice, by the subovate plano-convex corpuscles above mentioned; *limb* 6-parted, subventricose, segments lanceolate, interior flatter and undulate, exterior firmer with slightly hooked points. *Filaments* white, declining, patent, nearly twice the length of the corolla, connected below the middle by very narrow membranes into a slender tube indented above for more than half its length by an open narrow break, as the flower closes previous to decay protruding through the front of the flower along with the style: *anthers* veering, linear-oblong, green. *Style* white the length of the filaments, but much firmer. *Stigma* obtuse, simple.

a The corolla dissected vertically, to show the position of the six glandular corpuscles at the mouth of the tube.

PROTEA neriifolia.

Oleander-leaved Protea.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEÆ. *Jussieu gen.* 78. *Div. I.* Semen nudum aut fructus monospermus.

PROTEACEÆ. *Brown in trans. linn. soc.* 10. 15, *seqq.* *Div.* I. Fructus clausus. A. ANTHERÆ DISTINCTÆ: à corollâ liberæ. *Flores hermaphroditi,* rarò polygami dioici, *stigmate* tunc verticali. *Antheræ* apicibus concavis corollæ immersæ. *Germ.* 1-spermum. *Nux* subcrustacea v. *Samara.* *Squamulæ* v. *glandulæ* 4 hypogynæ. *Cor.* irregularis, labiata, laciniis 3 (rarò omnibus) cohærentibus. *Brown.*

PROTEA. *Cor.* bipartibilis, inæqualis, labii latioris laminis staminiferis cohærentibus. *Stylus* subulatus. *Stig.* angustius, cylindraceum. *Nux* undìque barbata, stylo persistenti caudata. *Recept.* commune, paleis abbreviatis persistentibus. *Involucr.* imbricatum, persistens. Frutices *modò proceriores et quandòque arborescentes, modò subacaules.* Fol. *integerrima.* Capitula *terminalia, rariùsve lateralia:* receptaculo *planiusculo, nunc convexo, sæpissimè glabro, paleis quandòque connatis alveolato:* invol. *magno, colorato, turbinato v. hemisphærico:* corollæ *labio latiore sæpè 2-3-aristato.* Brown in trans. linn. soc. 10. 74.

P. *neriifolia,* foliis lineari-lingulatis lævibus opacis margine subsimplicibus basi extùs ramisque tomentosis, involucri bracteis interioribus apice parùm latioribus dorso argenteo-sericeo margine nigro-barbato, calycis aristis laminas superantibus intùs pennatis, stylo pubescenti. *Brown l. c.* 81.

Cardui generis elegantissimi cujusdam caput. *Clus. exot.* 38. *fig.* 15.

Frutex *tripedalis v. magis, robustus, supernè axillis foliorum ramosus; caulis ramique tomentosi.* Fol. *sessilia, ligulato-oblonga acumine brevi obtusiusculo, quadriuncialia ultràque cum latitudine ¾ partium unciæ, basi nervo medio à supino tomentosa, juniora utrinque per totum nervum, ceterum villosiuscula.* Capitula *oblongo-turbinata subtriuncialia;* involucrum *infernè squarrosum,* bracteis *exterioribus margine fusco-sphacelatis, interioribus lineari-spathulatis laminâ erectâ, extùs obsoletè subrubentibus.* Corollæ *labium latius biaristatum, plumâ aristarum supernè subflavescente, infernè purpurascente; labium angustius uniaristatum extùsque plumosum.* Anth. *fuscæ, lineares.* Stylus *strictus, compressus, ochroleucus:* stigma *aciculare, purpureum.*

Excepting one species, found in Abyssinia by Mr. Bruce, the whole genus PROTEA, as far as it is now known, belongs to the Cape of Good Hope and the adjoining regions. Clusius, indeed, says, that the specimen described and figured by him, and cited by Mr. Brown to the present species, was, according to the account of the sailors, brought from Madagascar. The whole natural order, with a few exceptions,

and those considerably within the tropic, is stated by Mr. Brown to be confined to the southern hemisphere, where it is very extensively diffused, not only in latitude and longitude, but also in elevation.

Of the present species, which grows at the bases of the mountains near Cape Town, we have found no figure from the living plant. It borders extremely close upon P. *Lepidocarpon*, which is described as differing principally by the branches and leaves being free from pubescence, and the latter being roughish and shining, and also by the blade of the inner bractes of the involucre being not only beset by a long black-purple pubescence at the edge, but likewise at the back.

An upright robust shrub, about 3 or 4 feet in height, branching from the axils of the upper leaves: upper part of the stem and branches downy. *Leaves* opaque, ligulately oblong, scattered, sessile, patent, about 4 inches and a half long, ¾ of an inch broad, downy underneath at the base, younger ones conspicuously so along the whole midrib on both sides, and slightly so over the other part. *Flower-heads* single, terminal, upright, turbinate, about 3 inches deep; *involucre* pale, particoloured, squarrose downwards; *inner bractes* linear-spatulate, faintly red without, covered at the back with a close-pressed silky pubescence, the broader part straight and bearded by a black-purple pubescence round the edge. The feathery mass which presents itself at the mouth of the involucre is formed by the pubescence of the awns of the corollas, and is of a light tawny yellow colour. Broader lip of the *corolla* two-awned, with awns feathered on the inside, and longer than the blade of the lip. *Style* pubescent. *Stigma* acicular, purple.

A greenhouse plant; thriving best in sandy bog-earth. The drawing was made from a plant in the possession of Lord Stanley, which flowered in April last.

a Broadest lip of the corolla. *b* The narrowest. *c* Stamens, as they are situated in the blades of the two lips. *d* Bearded germen. *e* Style. *f* Stigma.

TEEDIA lucida.

Glossy-leaved Teedia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. Scrophulariæ. *Jussieu gen.* 117.
Scrophularinæ. *Brown prod.* 433.

TEEDIA. Cal. 5-partitus. *Cor.* hypocrateriformis, 5-fida, obtusa. *Stylus* brevissimus persistens. *Bacca* 2-loc., polysperma. *Rudolphi in Schrader's journal.* 2. 289.

Herbacea. Differt Capraria, *corollâ non campanulatâ laciniis acutis, sed hypocrateriformi laciniis obtusis; stylo brevissimo persistente, nec calycem superante deciduo. Baccâ, nec capsulâ.* Id. loc. cit.

T. *lucida*, foliis glabris.
Teedia lucida. *Rudolphi in loc. cit. Persoon syn.* 2. 166. *Hort. Kew. ed.* 2. 4. 47.
Capraria lucida. *Hort. Kew.* 2. 353. *Willd. sp. pl.* 3. 324.
Borckhausenia lucida. *Roth cat. bot.* 2. 56.

Biennis? graveolens. Caulis *ramosus 4-gonus angulis decursû petiolorum marginatis, internodiis brevioribus foliis, faciebus 2 oppositis alternè angustioribus.* Folia *opposita, remotiora, subbiuncialia, oblongo-ovata, acuminata:* petioli *alati, semiamplexicaules, triplo breviores laminâ vel magis.* Paniculæ *foliosæ decussatæ,* pedunculis *oppositis axillaribus tetragonis trifloris sublongioribus foliis,* pedicellis 2 *extimis rarò subdivisis:* bracteæ 2 *lineari-attenuatæ appressæ oppositæ ad basin trichotomiæ;* 2 *minores suboppositæ decurrentes modòque floriferæ circà medium pedicellorum extimorum, una paulò altiùs adnata alterâ.* Cal. *herbaceus,* ¼ *unciæ altus, segmentis subulatis erectis.* Cor. *rosea, decidua;* tubus *subrectus purpurascens, paulò altior calyce, anticè prope basin intrusus, posticè gibbosior, intùs radiis pictus 5 verticalibus albis inæqualibus præter 5tum brevissimum parallelis cum staminibus;* faux *pilosa;* limbus *horizontalis, stellâ purpureâ juxta faucem, laciniis ovatis obtusis, æqualibus.* Fil. *altè inclusa tubo, brevissima:* anth. *didymæ, ovato-subrotundæ;* pollen *ochroleucum.* Pistillum *totum viride, brevius staminibus:* stigma *subpileatum, convexum, ellipticum, obliquum, transversè obsoletiùs bifidum.* Bacca *globosa, nigra, magnitudine pisi majoris, basi cinctum calyce.*

A genus of the same natural order as the common Figworts (Scrophulariæ) of our own country, and partaking of the same disagreeable smell when rubbed or bruised. The present species, the only published one, is a native of the Cape of Good Hope, from whence it was introduced by Mr. Masson in 1774. Recorded in the Hortus Kewensis as a biennial greenhouse plant, flowering from April to May. We are not aware that it has ever been figured in any other work.

An herbaceous branching species, in the specimen we saw, about two feet high. *Stem* and *branches* square-cornered, the corners, with a narrow green edge, formed by the rim of the wings of the decurrent petioles, intervals shorter than the leaves. *Leaves* distantly decussated, about 2 inches long, oblong-ovate, acuminate: *petioles* winged, halfstemclasping, three times shorter than the blade, or more. *Panicles* leafy, decussated; *peduncles* oppositely axillary, square-cornered threeflowered, rather longer than the leaves, the two outer sometimes subdivided: *bractes* 2, linear tapered, close pressed, opposite, placed at the fork of the trichotomy; other two smaller, nearly opposite, decurrent and sometimes flowerbearing, situated about the middle of each of the outer pedicles, one adhering a little higher up than the other. *Calyx* herbaceous, about a quarter of an inch deep, with subulate upright segments. *Corolla* hypocrateriform, rose-coloured, deciduous; *tube* straightish, purple, dinted in front a little above the base, on the opposite side protuberant, marked on the inside with five unequal vertical pointed rays, 4 of which are parallel with the stamens; *faux* pubescent; *limb* horizontal flatly expanded 5-parted, with a deep purple star close to the orifice of the tube, segments ovate obtuse equal. *Filaments* deeply inclosed in the tube, very short: *anthers* twin, ovately roundish; *pollen* cream-coloured. *Pistil* wholly green, shorter than the stamens: *stigma* convex, elliptical, slanted, obsoletely and transversely bifid. *Berry* globular, black, about the size of a large pea; *seeds* many, small.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Parson's Green. Easily propagated by seed, which it produces freely.

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a Calyx. *b* Corolla dissected vertically. *c* Pistil.

DISA prasinata,

Mr. Griffin's Disa,

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. *Jussieu gen.* 64. *Brown prod.* 309.

Div. I. Anthera adnata subterminalis persistens. *Pollinis massæ* à lobulis angulatis elasticè cohærentibus; basi affixæ. *Brown in Hort. Kew. ed.* 2. 5. 188.

DISA. Cor. ringens: galea basi unicalcarata v. saccata, petala interiora columnæ accreta. *Labellum* ecalcaratum. *Idem loc. cit.*

Div. Calcare longiore.

D. *prasinata,* galea obtusa; calcare oblongo dorso subcarinato-convexo, ventre concaviusculo appresso germini sublongiori, labello lineari acutiusculo, spica laxa, bracteis floribus subbrevioribus.

Caulis *sesquipedalis, crassitudine pennæ mediocris, totus foliosus, erectus, virens.* Fol. *amplexicaulia, lanceolatìm ligulata, erectiuscula, sparsa, distantia, intervallis longiora, lætè virentia, decrescentia, carinâ crassiore, infernè rubentia præsertìm inferiora, longiora sub9uncialia, latitudine ¾ partium unciæ.* Spica *laxè subcylindracea, 6-uncialis v. ultrà.* Bracteæ *convoluto-lanceolatæ, erectæ, cuspidatæ, margine baseos membranaceo, apiculo rubro.* Flores *inodori, cum germine simul unciales.* Cor. *viridans, resupinata, ringens, patentissima:* galea *lata, cuneato-obovata, erecto-fornicata, parùm brevior calcare, intùs saturatè rosea, rubedine virorem externè perlucente;* calcar *virens compressiusculum:* pet. lateralia 2 inferiora *(utì galea, exteriora) lineari-oblonga, obtusula, depresso margine convexa, labellum versùs obliquata, retroflexa, modò ut ex apicibus ponè germen contingant, chloroleuca basi intùs maculis et punctis roseis:* labellum *istis æquilongum, duplo angustius, viride, deflexum, lævigatum, sensim versùs apicem incrascescens, convexum:* pet. lateralia 2 superiora *(utì labellum, interiora) crassiuscula, viridia, galeâ inclusa, erecta, à plano opposita, basi lata, indè abruptiùs angustata, lanceolata, obliquato-obtusa, emarginata, ultra basin punticulis irrorata.* Anthera *per summam columnam supinata; cuculli paries erecta, à parte galeæ proximâ incompleta, latere utroque replicato-auriculata atque cum petalis 2 intimis commissa:* pollinis massæ *clavatæ, luteæ, ex vesiculis variè pressis loricatìm dispositis.* Stigma *obliquè prominens trans pedem columnæ supra basin labelli.*

A genus confined to the Cape of Good Hope and the adjoining regions. Twenty-eight species have been enumerated by Willdenow. Two only appear to have found their way into the collections of this country, before the present unrecorded one, lately introduced by Mr. Griffin, with whom it flowered this spring. It comes near to both *rufescens* and *bracteata*; but is at once distinguished from the first, by an oblong spur which is shorter than the ger-

men; from the latter by a spike, in which the bractes are shorter than the flowers; from both by a narrow linear subacuminate label.

We did not inspect the root; but learned from Mr. Griffin, that it was a round undivided tuber. *Stem* about a foot and half high, with the thickness of a common pen, upright, green, leafy quite to the spike. *Leaves* stemclasping, lanceolately ligulate, scattered, almost upright, standing pretty far asunder, but much longer than the intervals, grass-green, decrescent upwards, keeled by a thickish midrib, red at the lower part, especially those nearest the root, longer ones about 9 inches in length, and about ¾ of an inch broad. *Spike* many-flowered, subcylindrically but loosely elongated. *Bractes* convolute, lanceolate, pointed, upright, somewhat shorter than the flowers, having near the base a colourless membranous margin, at their end a red point. *Flowers* without smell, including the germen about an inch long. *Corolla* greenish, resupinate, ringent, spreading: *galea* broad, obovate, upright, arched, but little shorter than its spur, a deep rose-colour on the inside, which colour shines through the green of the outside, *spur* slightly compressed green: *two lateral petals* of the lower lip (like the galea, exterior) linearly oblong, greenish white, somewhat blunt, depressed at the margin, convex, slanting towards the labellum, sometimes bent so far back as for their points to meet behind the germen, stained and dotted at their bases with purple: *labellum* of the same length as these but twice as narrow, green, dependent in front of the germen, linear, polished, thickening towards the end and convex: *two upper lateral petals* interior (as is the labellum, with which they agree in colour and substance) placed within the arch of the galea, and but little shorter than that, upright, standing broadways in relation to each other, with their inner edge towards the galea, very broad at the base, and from thence abruptly tapered, lanceolate, with a slantedly blunt point, emarginate, dotted above the base. *Anther* reversed over the summit of the column; its outer wall upright, incomplete at the end towards the galea, eared on each side, ears reversely folded, and let into a hollow at the base of the two inner petals.

a An outline of the corolla, with the galea forced back. *b* Anther.

CITRUS nobilis. β. *minor.*

Dwarf Mandarin Orange-Tree.

POLYADELPHIA *POLYANDRIA.*

Nat. ord. AURANTIA. *Jussieu gen.* 259. *Div. II.* Fructus polyspermus baccatus. *Folia punctata. Aurantia vera.*

CITRUS. Cal. 5-fidus parvus. *Pet.* 5, basi lata, inserta circà discum hypogynum, patentia. *Stam.* eidem disco imposita: *anth.* circitèr 20, filamentis connatis in varia corpora, in cylindrum dispositis basi appressis. *Stig.* globosum. *Bacca* cortice carnoso vesiculis (glandulis miliaribus oleum fragrantissimum fundentibus *Gærtn.)* innumeris papuloso, multilocularis, loculis 9-18, membranâ propriâ distinctis, intùs cellulosis pulposis & 1-2-spermis: *sem.* cartilaginea angulo interiori affixa. *Arbores aut frutices sempervirentes;* fol. *petiolo sæpè marginato; spinæ in pluribus axillares solitariæ;* pedunculi *axillares aut terminales,* 1-v. *multiflori.* Embryo *rectus assurgens, in C.* Aurantii vulgaris *semine triplex distinctus nullâ membranâ interpositâ.* Juss.

C. *nobilis,* petiolis sublinearibus, fructû depresso. *Hort. Kew. ed.* 2. 4. 420.
Citrus nobilis. *Lour. cochinch.* 2. 466.
Acrumen nobile chinense. *Galles. citr.* 175.
(α) major. *Andrews's reposit.* 608.
(β) minor. *Suprà.*

Arbor *mediocris, ramis ascendentibus.* Folia *lanceolata, integerrima, sparsa, nitida, obscuro-viridia, graveolentia;* petiolis *linearibus.* Flos *albus, 5-petalus, odoratus;* pedunculis *multifloris terminalibus.* Bacca *compresso-rotunda, subnovemlocularis, intùs et foris rubra, cortice crasso succoso, dulci, eduli, tuberculoso-inæquali. Sinensi vulgari duplo major est, diametro 5 pollices æquante. Citrorum omnium gratissima.* Loureiro de varietate (α) majore: loc. cit.

An entirely distinct species from the common China-Orange (CITRUS *Aurantium).* In the large variety (α) the fruit is deemed the most valuable of the genus, and called the Mandarin-Orange in virtue of its superiority. Both the large and small varieties were introduced by Sir Abraham Hume, by whom Mr. Edwards was favoured with the specimen from which the drawing has been made. Native of Cochinchina; cultivated at Canton. The fruit of the large sort sometimes measures five inches in diameter, and has a rind of deep saffron-colour. In *Aurantium* the petiole of the leaf is edged by broad wings and of an obcordate form; in *nobilis* it is linear with an extremely narrow straight edging; in the former the fruit is nearly spherical, in the latter considerably depressed, so as to be of greater breadth

than depth. The plant not having been yet cultivated in any of those countries from which we are supplied with oranges, the fruit has not found a place among the articles of commerce in this country. But we see no reason why it should not in course of time; it is produced as freely as that of the others in the conservatory at Wormleybury. We have heard that the tree does well at the Cape of Good Hope. The dwarf variety we suspect can scarcely be considered of any consequence but as an ornamental shrub.

a The calyx. *b* Stamens. *c* Pistil and hypogynous pedestal.

ANTHOCERCIS littorea.

Yellow Anthocercis.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SOLANEÆ. *Jussieu gen.* 124.
SOLANEÆ. *Brown prod.* 443. *Sect. II.* Corolla non plicata, regularis. Stam. didynama. Embryo levitèr arcuatus. Pericarpium capsulare v. baccatum.

ANTHOCERCIS. *Cal.* 5-fidus. *Cor.* campanulata, tubo basi coarctatâ, staminiferâ; limbo 5-partito, æquali. *Stam.* inclusa, cum rudimento quinti. *Stig.* capitato-emarginatum. *Caps.* 2-loc., 2-valv., valvarum marginibus inflexis, placentæ parallelæ insertis. *Sem.* reticulata. Frutices *glabriusculi.* Fol. *alterna, petiolo basive attenuatâ cum ramo articulata, crassa, nunc glanduloso-punctata.* Flores *axillares, subsolitarii, pedunculo minutè bracteato, ad articulum sæpiùs solubili.* Cor. *alba* v. *flava, speciosa, tubo intùs striato, limbo quandòque* 6-8-*partito.* Brown l. c. 448.

A. *littorea,* foliis obovatis impunctatis margine lævibus utrinque ramulisque glaberrimis, corollæ laciniis tubo longioribus, capsula oblonga calycem bis superante. *Brown in Hort. Kew. ed.* 2. 4. 53.

Anthocercis littorea. *Labillard. nov. holl.* 2. 19. *t.* 158. *Brown prod.* 448.

Frutex *orgyalis, ramulis erectis subangulatis.* Folia *integerrima aut dentata.* Flores *axillares terminalesque solitarii aut in racemis paucifloris,* pedunculo *communi breviori* pedicellis *suprà eundem articulatis ad summum incrassatis, nonnunquàm ejusdem pedunculi communis apice congestis umbellam simulantibus, singulis sub basi stipatis bracteis* 3-4, *squamulisque caducis acutis.* Cal. *semiöfidus, erectus, laciniis acutis.* Cor. *sulphurea,* tubo *intùs purpureo-lineato, vix duplo longiore calyce,* limbo *patente,* laciniis *lanceolatis, æqualibus, tubo longioribus.* Stam. *tubo inclusa, basin versùs inserta;* fil. *infrà latiusculis villosis:* anth. 2-*loc., ovatis.* Germ. *superum:* stylus *teres:* stig. *subcapitatum.* Caps. *ovato-oblonga, suprà attenuata:* sem. *plurima reniformia, scrobiculata, centrali affixa receptaculo, adnato utrinque valvularum marginibus introflexis, planis, cum eodem dissepimentum constituentibus.* Labillardière loc. cit.

An extremely rare plant in our collections, which we have been enabled to publish from a specimen that flowered in the hothouse at the nursery of Messrs. Lee and Kennedy, Hammersmith, in May last. A native of Lewin's Land, on the south-west coast of New Holland, whence it was first introduced by Mr. P. Good in 1803.

The representation of this species in M. Labillardière's work is from a dried subject. It is mentioned as a shrub, growing to the height of five or six feet, with upright somewhat cornered smooth branches. *Leaves* loosely scattered,

thick, not punctured, spathulately obovate, tapered into a kind of petiole, connected by a joint with the branch, finely chagreened, according to Labillardière sometimes dentate; in the specimen we saw none exceeded an inch in length. *Flowers* axillary, chiefly solitary, *pedicles* mounted by a joint upon thicker *peduncles; bractes* small, deciduous. *Calyx* green, half-fivecleft, tube narrow, pentangular, segments patent, subulate, shorter than the tube and faux of the corolla. *Corolla* palish yellow, monopetalous, funnelformly radiate: *tube* very short: *faux* broadly cupular, variegated by close brown vertical stripes within: *limb* sinuately sixparted, stellate, twice the length of the faux, segments linear-lanceolate, convex, margin revolute. *Filaments* much shorter than the faux, villous at the base, rudiment of the fifth villous: *anthers* yellow, round, didymous. *Style* longer than stamens, white, inclined, filiform, continuous with the pyramidal germen; *stigma* capitate, slanting, villous, transversely bifid with unequal lobes.

Although Mr. Brown has assorted this genus to the *Solaneæ*, he does not appear to think that tribe its final destination.

a Calyx. *b* Corolla dissected vertically. *c* Pistil.

GLOXINIA speciosa.

Rough-leaved Brasil Gloxinia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. CAMPANULACEÆ? *Jussieu gen.* 165.

GLOXINIA. *Cal.* superus, 5-phyllus. *Cor.* campanulata limbo obliquo. *Filamenta* cum rudimento quinti receptaculo inserta. *Willd. sp. pl.* 3. 229.

G. *speciosa,* foliis cano-hirsutis ellipticis oblongisve crenatis, pedunculis erectis longioribus flore; segmentis calycis angulari-acuminatis pubescentibus.

Gloxinia speciosa. *Loddige's botan. cabinet. n.* 28.

Herbacea, perennis? Caulis *totus foliosus, brevis? erectus.* Folia *opposita subovato-v. subrotundo-elliptica v. oblonga, majora* 8-*uncialia et ultrà latitudine sesunciali et ultrà, obtusè subacuminata, nervosa nervis crassis succulentis subtùs varicosissimis, modò infrà subpurpurascentia, infima patentissima humi appressa (anne semper?):* petioli *crassi, patentissimi, suprà canaliculati.* Flores *numerosi, speciosi, violacei, solitariò vel per trinos axillis superiorum diminutorum foliorum racemoso-digesti:* pedunculi *teretes, crassi, erecti, pilosi.* Germ. *breve, turbinatum, pubescens.* Cal. *erectus, germinis continuus,* 5-*partitus, segmento summo in plano cum pedunculo arrecto, submajore, distantiore, reliquis recurvo-patentibus.* Cor. *refracta, nutans, sesquiuncialis, elongato-campanulata, obliquè bilabiata, in dorso planior cum sulco medio elevato pilosiusculo, cæterùm glabra, subtùs supernè ventricosa pallidaque;* tubus *brevis gibbosus, basi obversus segmento postico calycis:* faux *maxima, intùs areolâ albâ pictâ lineis punctisque atropurpureis;* limbus *brevis* 5-*partitus, labio* superiore *bilobo reflexo,* inferiore *trilobo porrectiore: lobi in universum rotundati, transversìm latiores.* Glandulæ epigynæ 6 *dentiformes, breves luteolæ, cum filamentis alternæ, stylum basi cingentes.* Fil. *imo tubo inserta, subæqualia, alba, glabra, basi bulbosa;* rudimentum *quinti ponè stylum; nonnunquàm provenit sextum completum ante stylum unà cum cæteris connivens:* anth. *ochroleucæ in unam cernuam coadunatæ, didymo-subglobosæ, loculorum receptaculo reniformi crasso subdiaphano.* Stylus *albus, ascendens, uncialis, fistulosus, basi barbatus, cæterùm glaber:* stigma *hians, ore transversè latiore, intùs pruinoso.*

GLOXINIA differs from MARTYNIA in having a superior instead of an inferior calyx, and was first separated from the latter genus by the learned and sagacious L'Heritier. It differs from GESNERIA in not having a tubular corolla. The present species makes the second now on record. It is very ornamental, and continues in blossom for a month or more together. Lately introduced from the Brasils. The drawing was taken from a plant which flowered this summer in the hothouse at the nursery of Messrs. Lee and Kennedy, Hammersmith.

A perennial? herbaceous plant. *Stem* short? upright, leafy all the way up. *Leaves* opposite, subovately or broadly elliptic or else oblong, crenate, hirsute, greyish green, the larger ones 8 inches or more in length, 6 or more across, obtusely and shortly pointed, succulently nerved, often purple underneath where the nerves are very prominent, lowermost lying flat on the ground: *petioles* thick, outspread. *Flowers* many, in an upright leafy terminal raceme, violet-coloured, solitary, or by threes in the axils of the upper diminished leaves: *peduncles* upright, round, thick, pubescent, longer than the flower. *Germen* short, turbinate, pubescent. *Calyx* upright, continuous with the germen, five-parted, segments angularly acuminate, upper one in a line with the peduncle, rather the largest, distant, the rest patent and recurved. *Corolla* refracted, horizontally nodding, long-campanulate, about an inch and a half deep, slantingly bilabiate, flattened at the back with a pubescent middle ridge, otherwise smooth, ventricose and pale beneath; *tube* very short, gibbous, with the base facing the upright segment of the calyx; *faux* constituting by far the larger portion of the corolla, white on the lower part of the inside and spotted with purple; *limb* 5-parted, short; *upper lip* two-lobed reflectent, *lower* 3-lobed projecting: all the lobes rounded, and broader than long. *Epigynous glands* or *corpuscles* 6, shaped like teeth, small, yellowish, alternate with the filaments, surrounding the base of the style. *Filaments* inserted at the base of the tube, nearly equal, white, smooth, bulbous: the rudiment of the fifth is placed behind the style: we saw in one flower a sixth perfect stamen in front of the style: *anthers* cream-coloured, united, cernuous, nearly globular, didymous, with a kidney-shaped semitransparent thick fleshy receptacle. *Style* white, ascendent, an inch long, tubular, bearded at the base: *stigma* hiant, broadest crossways, frosted within.

a The stamens, with the rudiment of the fifth and two of the epigynous glands. *b* The pistil.

TEEDIA pubescens.
Hairy Teedia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARIÆ. *Jussieu gen.* 117.
SCROPHULARINÆ. *Brown prod.* 433.
TEEDIA. *Suprà fol.* 209.

T. *pubescens,* foliis utrinque pubescentibus. *Burchell MSS.*

Radix *biennis? ramosa.* Planta *bipedalis totâ pubescentiâ (ad lentem glandulosâ) molli, pingui* (HYOSCYAMI) *vestita, diffusa. Odor teter (minùs tamen quàm in* T. lucidâ). Rami *pauci ascendentes tetragoni farcti; internodia foliis breviora.* Folia *opposita, ovato-lanceolata acuta horizontalitèr patentia, attenuata in* petiolos *semiamplexicaules decurrentes, ramosè venosa, subrugosa, serrulata:* floralia *sessilia.* Pedunculi universales *axillares triflori patentes:* partiales 2 *laterales basi bracteâ parvâ sessili ovato-lanceolatâ suffulti, et gerentes in medio bracteas 2 parvas oppositas; intermedius brevior nudus.* Flores *inodori majores* T. lucidæ. Cal. *ad basin usque 5-fidus, campanulatus: laciniæ oblongo-lanceolatæ tubum corollæ æquantes.* Cor. *extùs pubescens hypocrateriformis regularis albo-rosea, maculis 5 atropurpureis in fauce hirsutâ decurrentibus:* laciniæ *rotundatæ patentes:* tubus *subincurvus, basi parte pronâ (v. sub staminibus longioribus) gibbus, intùs atro-purpureus.* Stam. *in medio tubi sita.* Fil. *brevissima.* Anth. *ovatæ pallidè flavæ.* Pistillum *staminibus brevius.* Germ. *globoso-depressum, ad basin à parte superiore nectario inconspicuo semiannulatum:* stylus *brevissimus:* stigma *capitatum, obliquum.* Bacca (capsula *baccata non dehiscens) globosa semipollicaris glaberrima nigro-purpurea bilocularis:* sem. *in receptaculo parietali inserta, numerosa nigra ovalia scrobiculata.* Burchell MSS.

An unpublished species, found by Mr. Burchell on rocky mountains in the district of Lange Kloof and in Auteniqua Land, at the Cape of Good Hope. The drawing was taken from a plant which flowered in the greenhouse belonging to that gentleman, at Fulham.

It may be distinguished at first sight from TEEDIA *lucida* by the pubescence and larger flower. We are obliged to Mr. Burchell for the above description.

Biennial? About two feet high, furred with a soft unctuous pubescence, like that which belongs to the Henbanes (HYOSCYAMI); the rank herbaceous smell peculiar to the tribe is here weaker than in *lucida.* Branches few, ascendent, 4-cornered, with sharp corners, solid; intervals shorter than the leaves. *Leaves* opposite, ovately lanceolate, pointed, spreading horizontally, tapered below into half-

stemclasping decurrent petioles, branchingly veined, slightly wrinkled, serrulate: floral ones sessile. *Peduncles* axillary, 3-flowered, spreading: *pedicles, two lateral ones* furnished at the base with a small ovately lanceolate bracte and with two other small opposite ones placed about their middle; *middle* one shorter and bracteless. *Flowers* larger than in *lucida*, without smell. *Calyx* campanulate five-parted: segments oblong-lanceolate equalling the tube of the corolla. *Corolla* pubescent on the outside, hypocrateriform regular palely rose-coloured, with 5 deep purple spots that extend themselves down the faux, which is hirsute: *segments* rounded, spreading: *tube* bent slightly inwards, gibbous at the part below the two longest stamens. *Stamens* inserted about the middle of the tube. *Filaments* exceedingly short. *Anthers* ovate, pale yellow. *Pistil* shorter than the stamens. *Germen* globular and depressed, half encircled at the base of the upper portion by an inconspicuous segment of a ring: *style* very short: *stigma* capitate, slanting. *Berry* globular, smooth, blackish purple, bilocular: *seeds* inserted into a receptacle fixed to the inner wall of cells, numerous, oval, black, scored.

a Calyx. *b* Corolla dissected vertically. *c* Pistil.

PANCRATIUM calathinum.

Chalice-crowned Sea-Daffodil.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div.* Germen inferum.
AMARYLLIDEÆ. *Brown prod.* 296. Sect. I.
PANCRATIUM. *Suprà vol.* 1. *fol.* 43.

Div. Coronæ incisuris staminiferis.

P. *calathinum*, 1-pluriflorum; spatha herbacea; limbo erectiusculo turbinato-campanulato parùm breviore tubo obtusè triquetro stricto; corona maxima cyathiformi haud multùm breviore limbo, sexiès excisa: foliis acutis.

Pancratium calathiforme. *Redouté liliac.* 353.

Pancratium narcissiflorum. *Jacq. fragm.* 86. *n.* 270. *t.* 138.

Folia *subsena, infrà longè fistuloso-vaginantia, suprà lorato-lanceolata acuminata plana, breviora scapo,* 1-2 *uncias lata.* Scapus *sesqui-bipedalis, anceps.* Spatha *æqualis tubo, lanceolata, obtusa, erecta.* Flores *sessiles, infundibuliformes, candidi, fragrantissimi.* Tubus *triuncialis v. ultrà, virens:* limbus *albus, supernè recurvus, à coronâ penitùs ad basin discretus; laciniis angustis, lineari-lanceolatis, carinatis, infernè involuto-canaliculatis.* Corona *alba, campanulato-cylindrica, transversè sublatior, sexiès excisa incisuris staminiferis, lobis intermediis rotundatis eroso-dentatis medio fissis: intùs radiis senis viridibus staminum continuis notata.* Stamina *æqualia lobis coronæ,* 3 *superiora introfracta,* 3 *inferiora inflexo-conniventia;* filam. *subulata, alba;* antheræ *polline vitellino flavicantes.* Capsula *bulbisperma.*

This fine species has not found a place either in Willdenow's Species Plantarum, or in the late edition of the Hortus Kewensis. Jacquin says that it has migrated to the gardens of Vienna from those of England. Yet we have neither met with it, nor heard of its being in any other collection in this country, but that of Mr. Griffin at South Lambeth; where the specimen from which the drawing was made flowered in the tan-pit of the hothouse in May last. In the same collection we were also enabled to assure ourselves of the specific distinction between the present and the one we had published as a variety of it in the 1561st article of Curtis's Magazine, and which we have since detached by the title of *nutans*, in a paper on this genus in the third volume of the Journal of Science and of the Arts. Both plants are native of the Brasils.

Leaves about six, shorter than the scape, fistular and sheathing below, where they have the appearance of a stem

of some length, above bifariously patent, lorately lanceolate, pointed, flat, from one to two inches broad. *Scape* ancipital, from a foot and a half to two feet high. *Spathe* with one or several flowers, herbaceous, lanceolate, rounded at the points, upright, equal to the tube. *Flowers* sessile, funnelform, white, extremely fragrant: *tube* obtusely triquetral, straight, 3 inches or more in length, green: *limb* wholly white, nearly upright, turbinately campanulate, but little shorter than the tube, recurved at the top, entirely detached from the crown, segments narrow, linearly lanceolate, keeled, involutely channelled below. *Crown* white, cyathiform, large, somewhat wider across, nearly as long as the limb, cut above into six lobes, incisures staminiferous lobes rounded erosely denticulate, shallowly cleft in the centre; on the inside, marked with six green rays descending from the base of the filaments. *Stamens* equal to the lobes of the crown, three upper ones infracted and pointing down the inside of the crown towards the bottom, 3 lower connivent and inflectent; *filaments* white, subulate; *anthers* with deep yellow pollen. *Capsule* bulbispermous.

CALLISTACHYS lanceolata.

Spear-leaved Callistachys.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. IV.* Corolla irregularis papilionacea. Legumen bivalve. *Arbores aut frutices; folia simplicia aut ternata aut impari-pinnata.*

CALLISTACHYS. Cal. bilabiatus. *Cor.* vexillo erecto; alis et carinis demissis. *Stam.* disco inserta. *Stylus* incurvus. *Stig.* simplex, acutum. *Legum.* stipitatum, lignosum, apice dehiscens, antè maturitatem multiloculare! polyspermum. *Frutices Australasiæ. Fol. simplicia, subverticillata, mucronulata. Stipulæ intrafoliaceæ, membranaceæ. Flores racemosi, terminales, bracteati.* Ventenat malm. 115.

C. *lanceolata,* foliis lanceolatis, acutis. *Ventenat loc. cit.*
Callistachya lanceolata. *Smith in trans. linn. soc.* 9. 266.

Caulis *erectus, teres, ramosus, foliatus, sericeo-pubescens, tripedalis et ultrà, subproliferus ramis subverticillato-approximatis patentibus.* Folia *subverticillatim bina trina v. quaterna, patentissima, brevè petiolata, stipulata, lanceolata, plurìes angustiora quàm lata, sericea, nervosa, reticulato-venosa, subtùs albidiora quàm suprà, mucrone præfixa;* petioli *brevissimi, basi articulati, decurrentes:* stipulæ *geminæ, intra basin petioli inserta, eoque parùm longiores, recurvatæ, lineari-lanceolatæ, membranaceæ, nigricantes, extùs sericeæ, perstantes.* Racemi *ramorum terminales, simplices, solitarii, erecti, ovato-oblongi, conferti, longiores foliis, bracteati;* pedunculus *infrà brevè nudus.* Flores *aureo-flavicantes, magnitudine* COLUTEÆ arborescentis: pedicelli *flore breviores, sericei.* Bracteæ *lanceolatæ, acutæ, membranosæ sericeæ, nigricantes, concavæ, una ad basin pedicelli aliæ suprà, caducæ.* Cal. *æqualis, sericeus, longitudine dimidii corollæ, acutus, labio infimo trifido patente.* Cor. petala *brevè unguiculata:* vexillum *erectum, suborbiculatum, emarginatum, basi rubro-maculatum:* alæ *deflexæ, æquales vexillo, cuneiformes, includentes carinam:* carina *obtusa, brevior alis, petalis utroque fine liberis medio cohærentibus.* Stamina *receptaculo corollæ inserta, carinâ inclusa.* Germ. *pedicellatum, inflatum, hirsutissimum.* Sem. 6-8, *reniformia, atra.*

A rare and handsome greenhouse shrub, introduced since the late edition of the Hortus Kewensis, we believe from the collections in France. First imported into Europe by Captain Baudin, the chief of the late French expedition of discovery to New Holland.

CALLISTACHYS was instituted by M. Ventenat, who had included in it the GOMPHOLOBIUM *ellipticum* of Labillardière, which Mr. Brown has removed to OXYLOBIUM. Another species was also incorporated in the genus by Sir James Smith in the Linnean transactions, under the specific name

of *cuneifolia*, and this Mr. Brown knows decidedly to be no congener of the present species. But in the concluding part of the Prodromus of the Flora of New Holland, other species, not at present published, will appear. The principal distinction of CALLISTACHYS from OXYLOBIUM consists in the seed-vessel of the first being divided into several one seeded cells while young, the partitions of which are obliterated in the ripe pod. No species of it has been recorded in any general System of Vegetables.

Stem 3-5 feet high, leafy, pubescent, branching, the branches approaching nearly to a whorl, as in a proliferous plant. *Leaves* nearly opposite or in whorls of 2, 3, or 4, spreading, shortly petioled, lanceolate, several times narrower than long, silky, nerved, reticulately veined, whiter underneath, mucronately pointed: *petioles* jointed at the base, decurrent: *stipules* two to each leaf, longer than petioles, linear-lanceolate, blackish, silky on the outside, spreading, recurved, persistent. *Racemes* terminal, simple, solitary, upright, ovately oblong, crowded, longer than the leaves. *Flowers* of a golden yellow, about the size of those of the Bladder-Senna; *pedicles* shorter than the flowers, silky. *Bractes* lanceolate, sharp-pointed, membranous, silky, nearly black, one placed at the base of the pedicle, the others upon it near the top, caducous. *Calyx* silky, equal, half as long as the corolla, pointed, with a trifid spreading lower lip. *Petals* of the corolla shortly unguiculate; *vexillum* or *standard*, nearly orbicular upright, emarginate, stained at the base with red: *alæ* or *wings*, deflectent equal to the vexillum, inclosing the *carina* or *keel*, which is shorter and obtuse. *Germen* pedicled, inflated covered with thick shaggy silklike pubescence. *Seeds* 6-8, black as jet.

The drawing was taken from a plant which flowered in June last, in the nursery of Messrs. Colvilles, in the King's Road, Chelsea.

a Calyx. *b* Vexillum. *c* One of the alæ or wings. *d* Carina or Keel. *e* The stamens. *f* The pistil.

GENISTA canariensis.

Canary Genista or Cytisus.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Corolla irregularis papilionacea. Legumen 1-loc., 2-valv. *Frutices aut herbæ; folia simplicia aut ternata aut rariùs digitata; stipulæ nunc subnullæ, nunc conspicuæ imo petiolo adnatæ aut ab eodem distinctæ.*

GENISTA. Cal. bilabiatus ⅔: dentibus binis superioribus brevissimis. *Vexillum* oblongum, a pistillo staminibusque deorsùm reflexum. *Willd. sp. pl.* 3. 936.

Div. Inermes.

G. *canariensis,* foliis ternatis oblongis subtùs pubescentibus pilis patulis, pedunculis multifloris terminalibus, ramis angulatis. *Willd. sp. pl.* 3. 936.

Genista canariensis. *Linn. sp. pl.* 2. 997. *Hort. Kew.* 3. 13. *ed.* 2. 4. 258. *Schulte obs. bot.* 145.

Cytisus I. *Clus. hist.* 1. 94.

Frutex *nunc orgyalis, villoso-canescens, ramosus, foliosus, ramis striato-angulosis.* Folia *numerosa, undique sparsa, ternata, foliolis* ½ *unciæ longis oblongo-obovatis, mucronatis, firmulis, utrinque villosis.* Flores *lutei, fragrantes, in ramis paniculatìm digesti;* pedunculi *albidi, villosi, filiformes, graciles, angulares, plures, axillares, infra flores diminuto-foliati, racemo subcorymboso plurifloro terminati;* pedicelli *breviores calyce,* bracteolis 2 *linearibus hirsutis stipati.* Cal. *parvus, albo-villosus, tubulosus, bilabiato-fissus,* labium superius *bifidum lobulis subulatis distantibus,* inferius *porrectum trifidum lobulis linearibus.* Corollæ vexillum *reflexum, oblongum;* alæ *lineares, angustæ, vexillum carinamque æquantes;* carina *pallida, villosa, dipetala, porrecta, petalis lineari-oblongis sublatioribus alis, apice rotundatis, supernè versùs obliquatis, basi supra ungues gibbosis.* Stam. *monadelpha.* Stylus *setaceus, supernè ascendens, glaber:* stigma *obtusum, compressum:* germen *lineare, virens, sericeum.*

A species native of Spain and of the Canaries, and a long standing inhabitant of our greenhouses. The present plant corresponds with that which has been delineated by Clusius as the Spanish one; the specimen from the Canaries, deposited by Mr. Masson in the Banksian Herbarium, has a larger foliage and blossom, and a ferruginous pubescence, but agrees in all other respects. The species comes very close to the hardier Montpellier Cytisus (GENISTA *candicans)* so frequent in our shrubberies, and which becomes in dry sandy soils spontaneous. It is seldom permitted to attain the full size, but is renewed frequently, the young plants being more compact and sightly, as well as better suited to the green-

house, where it must be kept in the winter. Known to have been cultivated here in 1656.

A tall upright shrub, when left to its full growth. *Branches* and *foliage* furred by a white villous nap, the former striately cornered and upright. *Leaves* numerous, scattered on all sides, ternate; *leaflets* about ½ of an inch long, obovately oblong, mucronate, rather firm, furred on both sides. *Flowers* fragrant, yellow, in several, or even many racemes, forming a panicle or corymb at the ends of the branches: *peduncles* axillary, upright, filiform, white, cornered, leafy below the flower, their leaves smaller than those on the branches and occasionally simple; *pedicles* shorter than the calyx, with two furred linear bractelets near to the flower. *Calyx* small, furred, tubular, bilabiate; upper lip bifid, segments subulate, wide apart; lower lip trifid, segments linear contiguous. *Vexillum* of the *corolla* oblong, reflectent; *alæ* equal in length to that as well as the carina, linear, narrow: *carina* furred, paler, 2-petalled, pointing forwards, petals linearly oblong, a little broader than in the alæ, rounded at the point and slanting upwards, gibbous at the base above the unguis. *Stamens* monadelphous. *Style* setaceous, ascendent above, smooth: *stigma* an obtuse point: *germen* linear, silky, green.

The drawing was made at the nursery of Messrs. Colvilles, in the King's Road, Chelsea.

a The calyx. *b* The vexillum. *c* One of the alæ. *d* The carina. *e* The stamens. *f* The pistil.

STENANTHERA pinifolia.

Fir-leaved Stenanthera.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Epacrideæ. *Brown prodr.* 535. *Sect. I.* Germinis loculi monospermi. Pericarpium clausum, raro capsulare (?)

STENANTHERA. *Cal.* 5-partitus, multibracteatus, persistens. *Cor.* hypogyna monopetala, tubulosa, *tubo* calyce duplo longiore, ventricoso, intùs absque fasciculis villorum; *limbo* 5-diviso, brevi, patenti, semibarbato. *Fil.* laciniis alterna, epipetala, inclusa, carnosa, antheris latiora; *anth.* simplices, receptaculo unico pollinifero, septum completum, rarò marginatum constituente; indivisæ, longitudinalitèr dehiscentes: *pollen* subglobosum parùm angulatum. *Germ.* sessile, 5-loc. *Stylus* 1. *Stig.* 1. *Drupa* subexsucca, putamine osseo, solido: *sem.* albuminosa: *embryo* teres, rectus, axilis, dimidio albumine longior.

Frutex *erectus.* Fol. *alterna, confertissima, acerosa.* Flores *axillares, erecti, tubo coccineo, limbo flavo-virescenti.* Discus hypogynus *cyathiformis, integer. Brown prod.* 538.

Stenanthera *pinifolia. Brown loc. cit.*

Bi-tripedalis subprolifero-ramosus, rigidus. Folia *undìque sparsa, rigida, subulata, suprà hirtiuscula convexa margine revoluto, infrà canescentia, mucrone sphacelato pungente præfixa.* Flores *racemosè aggregati.* Bracteæ *scariosæ, pallidæ, calycem imbricatìm cingentes, exteriores brevissimæ, interiores texturâ calycis parùmque breviores lanceolato-acuminatæ.* Cal. *dimidio brevior corollâ, convoluto-connivens, cuspidatus.* Cor. *subuncialis intùs pilis albis subappressis laxiùs pubescens, pilis juxtà infra apices nudos laciniarum in barbam densatis;* limbus *erectus pro ⅓ corollæ fissus, laciniis lanceolato-acuminatis superne patulis.* Fil. *alba, plana, lineari-oblonga, duplo breviora limbo cujus basi inserta.* Anth. *oblongæ, posticè ab apice appensæ, breviores filamentis.* Stylus *capillaris, viridis, erectus, glaber, æqualis tubo:* stigma *capitellatum, ustulatum:* germ. *globosum, viride, glabrum.*

This rare and elegant shrub is indigenous in the neighbourhood of Port Jackson, New South Wales. It has not been noticed by any botanist, except by Mr. Brown, in the work above cited. We met with it at Messrs. Colvilles' nursery, in the King's Road, Chelsea, where the drawing was taken in last June. Cultivated in the green-house.

The genus belongs to the first of the two sections of *Epacrideæ*, that which comprehends the genera more nearly allied to Styphelia, as distinguished from those nearer to Epacris, the type of the other section. A simple or one celled anther separates the members of this order at first

sight from those of the ERICEÆ, where the anther is bilocular, and of which not more than one or two species have been discovered within the limits of the regions where those of the present abound.

Speaking of the *Epacrideæ*, Mr. Brown says, "that the "abundance of this family in Terra Australis constitutes "one of the peculiarities of its vegetation. About 140 "species have been already observed, the greater part of "which are found in the principal parallel; the other, "however, continues numerous at the south end of Van "Diemen's Island, where several genera appear that have "not been met with in the other parts; within the tropic "very few species have been observed, and none with "capsular fruit."

"*Epacrideæ*," he continues, "with the exception of two "species found in the Sandwich Islands, are confined to "the Southern hemisphere; several species have been ob- "served in New Zealand, a few in the Society Islands, and "even in the Moluccas: the only species with capsular "fruit found within the tropic, is DRACOPHYLLUM *verticil- "latum*, observed by Labillardière, in New Caledonia; and "the only plant of the family known to exist in America, "is an unpublished genus also with capsular fruit, found by "Sir Joseph Banks in Terra del Fuego."

The present is yet an only species of its genus, from 1 to 3 feet high, upright, subproliferous or with ascendent branches placed almost in a whorl. *Leaves* scattered in all directions, densely crowded, acerose, hard, roughly pubescent above and convex, at the margin revolute, grey underneath, tipped by a sharp sphacelate prickle. *Bractes* many, fitted to the calyx, scariose, imbricant, pale, outer very short, inner of the same texture as the calyx and nearly as long, lanceolate, pointed. *Calyx* 5-parted, persistent, half the length of the corolla, connivent, cuspidated. *Corolla* scarlet below, green above, hypogynous, of one piece, tubular, about an inch long, slightly ventricose, thinly furred on the inside; hair white, flat-pressed, thickened into tufts just below the naked upper part of the five segments: *limb* 5-parted about ⅕ of the length of the corolla, upright, yellow and green, segments lanceolate pointed, spreading above. *Filaments* inserted at the base of the limb, alternate with the segments, enclosed, flat, white, linearly oblong,

broader than the anthers. *Anthers* with a single polliniferous receptacle constituting a complete (and sometimes, although rarely, bordered) partition of the interior of the anther, not divided at either end, opening longitudinally, suspended from the back at the top and facing inwards. *Hypogynous basement* glandular, cupped, entire. *Germen* globular, sessile, smooth, 5-celled: *style* green, capillary, smooth, equal to the tube: *stigma* capitate, of a burnt-brown colour. *Drupe* (or *Stone-fruit)* nearly dry, the shell of the nut or stone solid, and exceedingly hard: *seeds* with an *albumen*.

a The calyx with the bractes. *b* The corolla dissected vertically. *c* The pistil.

CHEIRANTHUS Cheiri. γ. *Chameleon.*

Chameleon Wall-flower.

TETRADYNAMIA *SILIQUOSA.*

Nat. ord. Cruciferæ. *Jussieu gen.* 237. *Div. I.* Fructus siliquosus, stylus nullus.

CHEIRANTHUS. Siliqua compressa v. anceps. *Cotyledones* accumbentes. *Cal.* clausus, foliolis oppositis basi saccatis. *Stigma* stylo insidens, bilobum, lobis patentibus v. capitatum. *Brown in Hort. Kew. ed.* 2. 4. 118.

C. *Cheiri,* foliis lanceolatis integerrimis: pube (dum adsit) bipartita appressa, siliquis linearibus; stigmatis lobis recurvis. *Brown. loc. cit.*
Cheiranthus Cheiri. *Linn. sp. pl.* 2. 924. *Hort. Kew.* 2. 395. *Willd. sp. pl.* 3. 516.
(α) flore simplici.
(β) flore pleno.
(γ) flore versicolore.

In our judgment the present plant is derived from the common Wall-flower; possibly a hybridous production between that and some nearly kindred species? Its leaves are somewhat longer and greyer than usual in the common garden sort; the pouches at the base of the two opposite leaflets of the calyx deeper, and the stigma rather broader and shorter; but with the exception of the curious transitions in the hue of the corolla, always yellow at first, we can see no difference in habit or œconomy between the two. We are told, that besides the colours displayed in the annexed figure, a deep copper-colour was among the changes exhibited by some individuals raised from the same parcel of seed as the present.

The specimen from which the drawing has been made, was the produce of seed received from Moscow by Mr. Lambert, by whom it was kindly sent to Mr. Edwards, from Boyton House, in Wiltshire.

Perfectly hardy, and requires no more attention in the treatment than the common sort, but is an infinitely gayer ornament to the garden.

It is clearly not the CHEIRANTHUS *versicolor* of the Flora taurico-caucasica of M. Marschal von Bieberstein.

If we have judged wrong in respect to its origin, and experience shall prove it to be distinct from *Cheiri*, the name we have adopted to denote the variation may serve for a specific title.

a The calyx. *b* The stamens. *c* The pistil.

AERIDES paniculatum.

Sir Joseph Banks's Aerides.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. *Jussieu gen.* 64. *Brown prod.* 309. *Div. II. Anthera* terminalis mobilis decidua. *Massæ pollinis* demum cereaceæ. *Brown Hort. Kew. ed.* 2. 5. 205.

AERIDES. Labellum calcaratum v. saccatum, insertum apice processûs unguiformis, cujus lateribus petala antica exteriorum adnata. *Massæ pollinis* 2 posticè bilobæ, processû communi stigmatis medio affixæ. *Brown loc. cit.* 212.

A. *paniculatum,* caule paniculato; calcare recto præpendente germini vix longiori, lobo terminali labelli difformi-trilobulato: foliis inæquali-retusis.

Planta *parasitica herbacea perennis:* caudex *rhizomatosus ramoso-radicatus, compressus, erectus, totus foliosus;* fibræ *intervallis foliorum laterales, vermiculari-elongatæ, teretes, crassæ, tortuosæ, nodoso-rugatæ, læves, cinereæ, fibrillis nudæ, apice virentes.* Folia *plurima, alterna, disticha, patentissima, firma, crassiuscula, lineari-lorata, canaliculata, subsesuncialia, lætè viridia, inæqualitèr retusa lobo altero productiore.* Caulis *aphyllus, inter folia lateralis, ascendens, purpureo-fusco varius, teres, lævis, rigidus, sesquipedalis, subgeniculato-flexuosus, articulis* bracteâ *brevi sterili cylindricâ vaginatus, paniculatus* spiculis *paucis multifloris alternè distantibus patentissimis, terminali arrecto-continua.* Flores *flavi, rubro-fusco picti, inodori, erecti, nec resupinati, sessiles,* bracteis *singularibus ovato-acuminatis luteis appressis germini eoque tèr quatèrve brevioribus.* Germ. *curvo-ascendens,* 6-*striato-teres, luteo-viridans,* ⅓ *unciæ longum.* Cor. *bilabiata, semiringens, rigidiuscula:* pet. 5 *semicirculari-patula, æquilonga,* ⅓ *breviora germine;* summum medium *(ex exterioribus unum) distantius, obovato-oblongum, subfornicatum;* lateralia superiora 2 *(ex interioribus) angustiora, lineari-oblonga, obtusa;* inferiora 2 *(ex exterioribus) duplo latiora, ab imis lateribus connata cum ungue labelli, ovali-oblonga, acutula suprà maculâ atro-sanguineâ picta, sursùm obliquantia;* labellum *porrectum, rigidum, carnosum, calcaratum, subtùs intrusum, ab ungue connexum cum columnâ, 3-lobum palato medio canaliculato albo pubescente, lobis 2 lateralibus inflexis erectis dentiformibus puniceis, terminali calcarigero ochroleuco trilobulato lobulo medio rostellato-capitato lateralibus subulatis alato-divergentibus (simul subsimulantibus volucrem);* calcar *pallidum oblongo-conicum subdidymo-inflatiusculum, obtusum, germini vix longiori præpendens, in longum æqualitèr bicameratum. Ante anthesin labellum totum super columnam reversum est.* Columna *oblonga, erecta, subcylindracea, virens, infrà punicea, parùm brevior petalis, foramine medio antico orificio oblongo marginato excavata, apice bidentata (rudimentis filamentorum?).* Anthera *terminalis, mobilis conceptaculo operculiformi subdidymo convexo intùs biloculari:* pollinis massæ *sessiles, collaterali-geminæ, hemisphæricæ, vitellinæ, durissimæ, homogeneæ, transversè bilobo-dissectæ, ex parte plana didymo-contingentes, posticè glandulæ sagittatæ stigmatis affixæ.* Stigma *ex lamellis 2 verticalibus dentiformibus parallelis diaphano-pallentibus juxtà infra antheram et suprà cavitatem columnæ prominentibus.*

A parasitic genus, instituted by Loureiro in his account of the plants of Cochinchina, and named in reference to the faculty its species possess of growing when suspended, so as to be cut off from all sustenance but that derived immediately from the atmosphere. Plants of other genera of this tribe, and even some of a different tribe *(see fol. 105 of this work)*, are endowed with a like faculty; in none however can such insulation be considered as the state of existence which suits them best, but merely as one that they are enabled to endure, as a Carp is known to do that of being suspended out of water in a damp cellar. The most successful mode of treating plants of this nature in these climates, has been devised by Sir Joseph Banks, to whom we are obliged for the opportunity of representing the present specimen, which flowered in the hothouse of his garden at Smallberry-Green, and had been introduced by himself. The method he pursues, is, to place the plants separately in light cylindrical wicker baskets or cages of suitable widths, of which the frame-work is of long slender twigs wattled together at the bottom and shallowly round the side, the upper portion being left open that the plant may extend its growth in any direction through the intervals, and yet be kept steady in its station, the ends of the twigs having been tied together by the twine that suspends the whole to the woodwork of the stove, a thin layer of vegetable mould is strewed on the floor of the basket, on which the rootstock is placed, and then covered lightly over with a sufficiency of moss to shade it, and preserve a due degree of moisture, water being occasionally supplied. The diminished outline in the corner of the annexed plate is intended to exemplify he appearance of our plant under that treatment.

The present is an unpublished species, and native of China. We do not believe that any of the genus has been figured from a plant which has flowered in Europe till now. It is closely allied to the Chinese portion of Cymbidium, in which the label, however, has not a spurlike pouch as here.

Aerides *paniculatum* is an herbaceous perennial; the caudexlike *rootstock* leafy from top to bottom, compressed, upright, branchingly radicant, *roots* lateral in the intervals of the foliage, round, thick, tortuous, knottedly wrinkled, smooth, of a colour resembling that of the silkworm, green at the points. *Leaves* many, alternate, in two ranks,

spreading, firm, rather thick, linearly lorate, channelled, about six inches long, bright green, unequally retuse, the lobe of one side being higher than the other. *Stem* leafless, lateral between the leaves, ascendent, mottled with dark-purple, round, smooth, rigid, about a foot and half high, flexuose and slightly kneed, sheathed at the joints by a short cylindrical sterile *bracte*, panicled; *spikelets* few, many-flowered, alternate, distant, wide spread, the end one upright and continuous. *Flowers* deep yellow, marked with brownish red, without scent, upright, not reversed or resupinate, sessile; *bractes* one to each flower, ovately acuminate yellow, placed against the germen, which is 3 or 4 times higher. *Germen* upright with a curve, round and sixstreaked, yellowish green, ½ of an inch long. *Corolla* bilabiate, semiringent, stiffish; *petals* 5, spreading in a semicircle, of one length, a third shorter than the germen; *the upper middle one* somewhat aloof from the rest, obovately oblong, and slightly vaulted; *two upper lateral ones* narrower, linearly oblong, obtuse: *two lower ones* twice broader, grown to the unguis of the label by the lower part of each side, rather pointed, marked with a red stain above, slanting upwards; *label* outstretched, stiff, fleshy, spurred, dinted underneath, connected by its unguis with the column, 3-lobed with a white channelled furred palate or boss in the middle, the *two side lobes* turned up, toothshaped, crimson, *end one* spurbearing yellowish white trifid, the central lobule capitate and beaked, the two side ones subulate and outspread, the three composing an image that may be fancied to resemble a bird in miniature; *spur* pale-coloured oblong, conical, slightly inflated and didymously divided by a shallow furrow, hanging before the germen which it nearly equals, vertically two-chambered within. The whole label is reversed over the column before the flower opens. *Column* oblong, upright, nearly cylindrical, green, crimson below, but little shorter than the petals, having a central cavity in front, with an oblong bordered orifice, bidentate at the apex (the teeth being probably the rudiments of two filaments?). *Anther* terminal, moveable, with a convex lid-shaped bilocular receptacle: *pollen-masses* two sessile, very hard, homogeneous, hemisphærical, transversely bisected, smooth, deep yellow, placed sideways to each other by the plane part, inserted at the forked gland of the stigma. *Stigma* of two vertical parallel teethlike, pale,

diaphanous laminæ, jutting forwards just below the anther and above the cavity of the column.

a The back of the entire anther. *b* The pollen-masses removed from their receptacle.

Syd. Edwards del.

Pub^d by Ridgway & Sons Sepr 1.1817.

White sc 14 Brownlow St

PANCRATIUM angustum.
Mr. Griffin's Sea-Daffodil.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germ. inferum. AMARYLLIDEÆ. *Brown prod.* 296. *Sect. I.*

PANCRATIUM. *Flores* scaposi, umbellati, bracteato-distincti, rarò solitarii; *spatha* 2-plurivalvis. *Cor.* supera, erecta v. ex medio nutans, nunc pendulo-cernua; tubuloso-sexfida, *limbo* stellato, rariùs connivente. *Fil.* in ore tubi, membranâ coroniformi rarò irregulari infernè variè connexa, indè patentia v. conniventia v. introfracta, interdùm declinata; rarissimè discreta et basi brevè alata; vix unquàm exserta: *anth.* versatiles. *Stylus* inclinatus, rariùs brevior corollâ: *stig.* simplex v. 3 brevia. *Caps.* membranosa, 3-loc., 3-valv. valvis medio septiferis: *sem.* plurima, biseriata, v. in singulo loculo collaterali-gemina, v. solitaria et loculamento conformia, v. tuberoso-laxata.

Bulbus *tunicatus.* Fol. *bifaria v. nunc subplurifaria, angustè lorata ad elliptico-lanceolata, interdùm petiolata, rarò cum laminâ transversè latiore. Differt* CRINO *filamentis aut monadelphis aut basi brevè alatis: ab* AMARYLLIDIBUS *cum tubo coronato ex eo quòd in iis corona à filamentis undique disjuncta sit; à proximo* NARCISSO *quòd ibì filamenta coronâ inclusa atque infra os tubi inserta sint. Seminum* testa *in loculamentis polyspermis nigricans.* Nob. in Journ. scien. & arts. 3. 316.

Div. II. Floribus sessilibus v. subsessilibus: limbo radiato: dentibus senis coronæ staminiferis.

P. *angustum,* pluriflorum; foliis loratis longè acuminatis lucidis; tubo rotundatè trigono estriato; laciniis isto sublongioribus divaricatis, à coronâ triplo breviore angustè infundibuliformi omninò discretis. *Nob. in Journ. scien. & arts.* 3. 327.

Folia *lætè virentia, plurima, bifariàm divaricata, sesquipedalia v. ultrà, sesquiunciam lata.* Scapus *2-pedalis, glaucus, anceps.* Spatha *arida, acuta.* Flores *5, albi, sessiles, fragrantes in extensum subquinquunciales:* tubus *virens, ¼ parte v. circà brevior laciniis externis:* limbus *radiatus, recurvus, laciniis angustis, linearibus, extimis sublongioribus.* Corona *limbo magìs triplo brevior, spatiis interstamineis lobato-elevatis lobis acuminatis bidentatis v. bifidis, erectis.* Fil. *erectiuscula, virentia, duplo longiora coronâ, ⅓ parte v. circà breviora limbo:* anth. *luteæ, ¼ partes unciæ longæ.* Stylus *virens, corollâ brevior.* Germ. *glaucum: loculamenta disperma, ovulis erectis oblongis affixis imo angulo loculamentorum.* Nob. in loc. cit.

An unpublished species, of the native country and introduction of which we have no information, but the degree of its impatience of cold proves it a tropical plant; probably from South America? Differs from *caribæum* by a narrowly lorate foliage; from *littorale* and *Dryandri* by a tube, which is rather shorter than the limb, and in ge-

neral appearance. The drawing was made from a specimen which flowered in Mr. Griffin's collection at South Lambeth.

Leaves many, bright green, lorate, tapered into a long point, a foot and half or more in length, scarcely an inch and half broad. *Scape* about two feet high, ancipital, glaucous. *Spathe* sphacelate, pointed. *Flowers* several (about 5) sessile, fragrant, white, nearly 5 inches long when extended: *tube* triangular with rounded corners, streakless, about ¼ shorter than the segments: *limb* radiate, recurved, divaricate; segments narrow, linear, outer ones rather the longest. *Crown* more than three times shorter than the limb, narrowly funnelform, entirely separated from the segments, bearing the stamens on six of its pointed lobules, the intermediate ones of which are acutely bidentate or bifid, upright. *Filaments* nearly straight, green, twice the length of the crown, about ¼ shorter than the limb: *anthers* yellow, about ¾ of an inch long. *Style* green, shorter than the flower. *Germen* glaucous: *loculaments* two-seeded, ovules upright oblong fixed in the corner of the bottom of the cells.

Syd. Edwards del.

White sc. 14 Brownlow St. Holborn.

Pub.d by Ridgway & S

CONVOLVULUS pannifolius.

Cloth-leaved Bindweed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Convolvuli. *Jussieu gen.* 132.
Convolvulaceæ. *Brown prod.* 481.
CONVOLVULUS. *Suprà vol.* 2. *fol.* 133.

Div. Caule volubili.

C. *pannifolius,* foliis cordato-hastatis hirsutis, pedunculis subtrifloris, bracteis linearibus à calyce remotis. *Dryander in Hort. Kew. ed.* 2. 1. 328.

Convolvulus pannifolius. *Salisb. parad.* 20.

Frutex *volubilis, orgyalem v. duplo majorem acquirens altitudinem,* caulis *badio-fuscus* rami *teretes hirsuti.* Folia *oblongo-cordata prolixiùs v. abruptè acuminata, villositatem aridam subasperam densam albam pellucentia, majora 4-5-uncialia v. circà latitudine 2-3 unciarum, subtùs reticulato-rugosa cum nervis plurimis lateralibus varicosis pallidis:* petioli *hirsuti aliquotiès breviores laminâ.* Pedunculi *solitarii, axillares, longiores folio, filiformes, duriusculi, hirsuti, divaricati cymoso-3-20-flori;* pedicellis *triplo brevioribus bibracteatis,* bracteis 2 *ad divisuras primarias foliaceis subæquantibus pedicellos, cæteris minimis subulatis.* Cal. *hirsutus, deorsùm tubuloso-convolutus, suprà campanulato-rotatus, pluriès brevior corollâ, foliolis rhombeo-lanceolatis, acuminatis.* Cor. *turbinato-rotata, obsoletè quinquangularis diametro subsesquiunciali, violaceo-purpurascens at dilutè, disco et tubo albicans, radiis quinque plicatis saturatiùs coloratis subtùs hirsutis stellata;* tubus *conicus, calyce brevior.* Fil. *tubo exserta, æqualia, fasciculata, pro parte majore glanduloso-pilosa, alba:* anth. *ochroleucæ, lineari-sagittatæ, extrorsùm dehiscentes.* Pist. *æquale staminibus.* Germ. *album, pyramidatum, glabrum, disco carnoso cupulato flavescente insitum;* stylus *albus:* stig. 2 *linearia divaricata æqualia stylo, vel longiora apice pubescentia.*

A twining greenhouse shrub, extending itself to the length of 15 or 20 feet in various directions, and well suited to the conservatory. In strong plants the flowers amount to twenty in a single bunch, when they make a fine appearance. It was first noticed by Mr. Salisbury in the work we have cited; the leaves have the appearance and feel of woollen cloth, as implied by the well-adapted specific name. The place from which it originally comes has not been ascertained; but is suspected to be some of the Canary Islands. The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milnes, King's Road, Fulham.

Stem reddish-brown; branches round, with a shaggy nap.

Leaves oblong cordate, sometimes far acuminate, sometimes shortly and abruptly so, with a dense dry hardish pubescence on both sides, the largest are about 5 inches long, and from 2 to 3 broad; reticulately veined and wrinkled underneath, with many pale varicose nerves: *petioles* shaggy, several times shorter than the blade. *Peduncles* solitary, axillary, longer than the leaf, filiform, and rather hard, roughly pubescent, divaricate, divided upwards into cymes of from 3 to 20 flowers; *pedicles* 3 times shorter than these, bibracteate, the two *bractes* at the primary divisions leaflike and nearly equal to the pedicles, the others small and subulate. *Calyx* roughly pubescent, tubularly convolute below, above campanulately rotate, several times shorter than the corolla, *leaflets* rhomboidally lanceolate, pointed. *Corolla* turbinately rotate, slightly 5-cornered, about an inch and half over, of a pale violet-purple colour, white in the disk and tube, marked with five deeper stellate folds, which are roughly pubescent at their under side; *tube* conical, shorter than the calyx. *Filaments* rising above the tube, equal, fascicled, white, and for the greater part beset with glandular hairs: *anthers* cream-coloured, linearly sagittate, opening outwards. *Germen* white, pyramidal, smooth in our specimen (not pubescent, as it is described and figured in the Paradisus Londinensis), placed on a fleshy cupular yellow basement. *Style* white: *stigmas* 2, linear, divaricate, equal to or longer than the style, pubescent at their points.

a The lower part of the corolla dissected, so as to show the insertion of the stamens. *b* The pistil.

Syd. Edwards del. Pub.d by Ridgway & Sons, Sep.r 1. 1817. White sc. 14, Brownlow St. Holborn.

PSORALEA pedunculata.

Flat-headed Psoralea.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Corolla irregularis papilionacea. Legumen 1-loc. bivalve.

PSORALEA. *Cal.* turbinatus 5-fidus, punctis callosis aspersus. *Pet.* venosa; carina 2-petala. *Leg.* compressum, calyci persistenti æquale 1-spermum. *Herbæ aut frutices; fol. ternata v. rariùs simplicia v. imparipinnata; stipulæ à petiolo distinctæ; flores spicati v. glomerati, axillares aut terminales.* Juss. l. c. 355.

P. *pedunculata*, foliis ternatis subtùs sericeis, pedunculis axillaribus bìs tèrve superantibus folia, capitulis depressis involucratis, involucri foliolis æquantibus calyces.

Frutex *erectus, ramosus 3-pedalis v. ultrà; rami teretes striati subsericeo-pilosi.* Fol. *sparsa, distantia, patentia,* foliolis *obovato-oblongis v. lanceolato-ovalibus, mucronatis, suprà pilosiusculis subnitidè at obscurè viridibus, subtùs sericeis albicantibus, à nervis lateralibus plurimis parallelis proximis costatis, margine depresso; terminali majore modò sesquiunciali, v. 3-plo longiore* petiolo *villoso unisulcato:* stipulæ *geminæ, æquales petiolo, erectæ, appressæ ramo, lanceolato-lineares, extùs densè pubescentes.* Pedunculi *solitarii, in summis foliis axillares, striato-teretes, erecti, pilosiusculi, supernè nigricantes, basi stipati* bracteis 2 *oppositis stipulis inclusis, nigro-pilosis.* Capitulum *depresso-hemisphæricum, multi* (14-20)*-florum, involucratum* foliolis *membranosis ovato-lanceolatis intùs glabris extùs nigro-pilosis æquantibus calyces.* Bracteæ *triplices, similes foliolis involucri at plurimùm angustiores.* Cal. *pro flore magnus, albo-virescens, nigro-hirsutus, segmentis* 4 *superioribus acuminatis æqualibus, imo* 5to. *duplo ferè longiore, vix breviore corollâ, lanceolato-cuspidato, secundùm carinam ascendente.* Cor. ½ *unciæ circitèr longa;* pet. *longè unguiculata, isometra, infernè pallescentia, supernè violacea, tota venuloso-striata;* vexillum *obcordato-rotundum reflexum plicâ mediâ profundâ, ungue arcuato-gibboso:* alæ *et* carina *compresso-conniventes vexillum versùs assurgentes, alarum laminis oblongis obtusis suprà violaceis;* carina *his æqualis, inclusa, unguibus longissimis, laminis ovatis apice cohærentibus sanguineo-violaceis.* Fil. *diadelpha, uno libero sterili, pro longitudine carinæ recta, indè cum angulo recto ascendentia:* anth. *ochroleucæ, parvæ.* Germ. *breve, compressum:* stylus *longus capillaris glaber albus propè stigma angulo recto assurgens, ad genu crassior:* stigma *acutum puberulum, erectum, viridans.*

A plant we are unable to refer to any species recorded in the works known to us; and, as we are informed by Messrs. Whitley and Co. in whose greenhouse, in the King's Road, Fulham, the drawing was taken, raised by them from seed received from the Cape of Good Hope. It comes nearer to the P. *bituminosa* of the south of Europe than any other, but is abundantly distinct from it, as well as from the

bituminosa β of Bergius, a Cape plant, quoted by Willdenow among the synonyms of the European species, although described as having terminal flowers, which in the European plant are axillary.

A branching upright shrub, in the specimen we saw, the only one probably in the country, about 3 feet high; branches round, striate, softly pubescent. *Leaves* scattered, distant, patent, *leaflets* obovately oblong or lanceolately oval, mucronate, thinly pubescent, dark green, and somewhat glossy at the upper side, silky and whitish at the under, with several closish lateral riblike nerves, depressed at the margin, terminal one the largest and sometimes an inch and half long, three times as long as the villous one-furrowed petiole, or more: *stipules* double, equal to the petiole, upright, pressed to the branch, lanceolately linear, densely pubescent outwards. *Peduncles* several, solitary, axillary in the uppermost leaves, striately round, upright, slightly haired, blackish above, furnished at the base with opposite bractes enclosed within the stipules and black-furred. *Flower-head* depressedly hemispherical, many-flowered, with an *involucre* of membranous ovately lanceolate externally black-furred *leaflets*, which are even with the tips of the calyces. *Bractes* threefold, *leaflets* quite distinct, and like those of the general involucre, but much narrower. *Calyx* large in proportion to the flower, pale green, black-furred; 4 upper segments acuminate, equal, the lowermost fifth almost twice the length of these, and nearly equal to the corolla, lanceolate, long-pointed, and stretching along the keel of the corolla. *Corolla* about ⅓ of an inch in length; *petals* of one length, long unguiculated, pale below, violet-blue above, veined and streaked throughout; *vexillum* rounded, obcordate, reflectent, with a deep plait along the middle, ungues vaulted: *wings* and *keel* compressedly connivent, bent towards the vexillum, the blades of the wings oblong, obtuse, violet above; *keel* enclosed, with very long ungues, blades ovate cohering at the ends, where they are of a deep purple violet. *Filaments* in two bodies, one of which is a single sterile one, the others straight as far as the length of the keel, thence turned up at a right angle: *anthers* pale yellow, small. *Germen* compressed, short: *style* long, capillary, smooth, white, bent upwards near the stigma at a right angle, thickened at the bend: *stigma* pointed, pubescent, upright, green.

a Calyx. *b* Vexillum. *c* Alæ. *d* Carina. *e* Stamens. *f* Pistil.

Syd. Edwards, del.

White sc. 14, Brownlow St. Holborn.

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MAHERNIA grandiflora.

Large-flowered Mahernia.

PENTANDRIA *PENTAGYNIA.*

Nat. ord. TILIACEÆ. *Jussieu gen.* 289. *Div. I.* Stamina basi aut omninò monadelpha, definita. *Tiliaceæ dubiæ.*

MAHERNIA. *Cal.* 5-dentatus. *Pet.* 5. *Nectaria* 5, basi connata, obcordata, filamentis supposita. *Caps.* 5-locularis. *Willd. sp. pl.* 1. 1565.

M. *grandiflora*, caule erecto, foliis lanceolato-obcuneatis serrato-dentatis; paniculis divaricatis calyceque viscosis. *Burchell MSS.*

Hermannia grandiflora. *Hort. Kew. ed.* 2. 4. 141; *(fide Herbarii Banksiani, ubi specimen Horto Kewensi floridum).*

No. 2333. *Burchell; Catalogus Herbarii Africani nondùm edit.*

Hermannia. *Paters. it.* 60 *cum icone pictâ.*

Fruticulus *in patriâ natali subbipedalis ramosus pulcherrimus floribundus, ramificatione patente. Tota herba, potissimùm in partibus novissimis, conspersa glandulis stipitatis viscosis, non nisì lente conspicuis.* Fol. *alterna, patentia, subcollapsa, lanceolato-obcuneata, stellatìm pubescentia, attenuata in petiolum, superiore parte serrato-dentata.* Stipulæ *geminæ, ovato-lanceolatæ, erectæ, integerrimæ (rarissimè* 1-*dentatæ), pedunculo breviores.* Flores *paniculati cernui, unciam vel infrà lati, odorem inter* PHILADELPHI coronarii *et* JASMINI officinalis *medium spirantes.* Paniculæ *ramorum primò terminales, demùm elongatione ramorum axillares evadentes, viscosæ, divaricatæ, dichotomæ, ramulis primariis aliquandò tribus.* Pedunculi *mediocres, teretes, bracteolis* 2 *stipularum instar suffulti.* Cal. *campanulatus, ultra medium* 5-*fidus, laciniis lanceolatis acutis erectis.* Cor. *maxima in genere, calyce triplo longior, utrinque (miniato-) coccinea, sinistrorsùm (aliquandò dextrorsùm) contorta, infundibuliformis:* pet. *elongato-obovata,* ½ *pollicis longa, apice rotundata, unguium lateribus tubuloso-involutis, laminis patentibus demùm reflexis.* Stam. *petalis opposita, calyce multò breviora, medium styli attingentia:* fil. *discreta, pedicello germinis inserta; partes inferiores* (nectaria *Linn.) elongato-obcordatæ humeris hirsutis, superiores* (filamenta *Linn.) subulatæ.* Anth. *sagittatæ, extùs setulis aspersæ, apicibus conniventibus bifidis bisetiferis.* Pist. *longitudine calycis.* Germ. *(lente visum) pubescens, obovatum,* 5-*gonum, abruptè et brevissimè pedicellatum.* Styl. 1, *teres, germine paulò longior, glaber, abruptè insertus, apice obtuso.* Stig. *obsoletum.* Caps. *obovata,* ½ *pollicis longa* 5-*sulcata* 5-*partibilis:* loc. *intùs pubescentia sub*-5-*v.* 6-*sperma (sectione germinis* 10-*sperma).* Sem. *valvularum marginibus interioribus inserta, semicordata, nigricantia, glaberrima.* Burchell MSS.

"This very elegant plant was found by me in the month "of October 1812, in great profusion decorating one parti-"cular part of the vast sandy plains northward of the town "of Litakuun, a country till then untrodden by any Euro-"pean foot.

"These plains, uninhabitable to man from want of

" water, extend for many days journeys. Their monoto-
" nous scenery is occasionally varied by groves of ACACIA
" *Giraffæ*, whose thin foliage, unable to protect these burn-
" ing sands from the rays of the sun, serves only as food
" for the Cameleopard and Elephant. Various plants,
" however, in their seasons adorn the ground, and amongst
" them this beautiful little MAHERNIA, by its profusion and
" continued succession of scented flowers of the finest
" scarlet, will not fail to arrest the attention of any tra-
" veller, however insensible he may be to the pleasures to
" be derived from the study and contemplation of nature.

" If the genera HERMANNIA and MAHERNIA are to be
" kept distinct, this plant must take its station with the
" latter, and their only diagnoses will be the difference of
" form in their filaments."

The above notice and description were communicated to us by Mr. Burchell, by whom this plant was brought home, on his late return from his travels in the interior of the Cape of Good Hope. The drawing was taken from a specimen that flowered in the greenhouse at Messrs. Colvilles, in the King's Road, who have the only plants of it now in this country. It had been previously introduced from another part of the Cape of Good Hope by Mr. Masson, in 1791; but had been long since lost again.

This beautiful plant seldom exceeds two feet; the branches are spreading, and abound with a bloom by far the largest of the genus. *Leaves* patent, cuneately lanceolate, stellately pubescent, tapered into a petiole below, serrately toothed above. *Stipules* in pairs, ovately lanceolate, shorter than the peduncles. *Flowers* panicled, cernuous, somewhat less than an inch in diameter, like those of an OXALIS, sweet-scented: *panicles* terminal, dichotomous, divaricate, sometimes with 3 principal divisions. *Pedicles* round, having two small *bractes* like the stipules. *Calyx* campanulate, cleft to below the middle, segments lanceolate, acute. *Corolla* contorted to the left, but sometimes in the contrary direction, funnelformly rotate: *petals* oblong-obovate, rounded at the top. *Filaments* distinct, inserted on the stand of the germen, the lower portions (nectaries of Linnæus) oblong-obcordate, the upper (filam^s^. of Linn.) subulate.

a The calyx. *b* The stamens. *c* A single stamen magnified. *d* The pistil. *e* A petal.

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CISTUS vaginatus.
Oblong-leaved Cistus.

POLYANDRIA *MONOGYNIA.*

Nat. ord. CISTI. *Jussieu gen.* 294.

CISTUS. *Cor.* 5-petala. *Cal.* 5-phyllus: foliolis duobus minoribus. *Capsula.* Hort. Kew. ed. 2. 3. 303.

Div. Exstipulati fruticosi.

C. *vaginatus,* arborescens, exstipulatus, foliis oblongis pilosis subtùs reticulato-rugosis, petiolis basi coalitis vaginantibus sulcatis. *Hort. Kew.* 2. 232.

Cistus vaginatus. *Jacq. hort. schœnbr.* 3. 17. *t.* 282. *Willd. sp. pl.* 2. 1183. *Hort. Kew. ed.* 2. 3. 304.

Cistus symphitifolius. *Lamarck encyc.* 2. 15.

Frutex 4-*pedalis v. ultrà,* caulis *erectus, teres, ramosus, cortice glabro et lacero.* Folia *opposita, oblonga, utrinque angustata, acuta, ad lentem obsoletiùs crenulata, utrinque et ad oras pilosa, viscosula, subtùs rugosa et pallidè virentia, facie venosa, 2-4 uncias longa, cum* petiolis *vix semuncialibus, pilosis, suprà canaliculatis et basi in vaginam longiusculam (striatam) pilosam glutinosam magìsque quàm ipsa folia ladanum spirantem concretis.* Stipulæ 0. Pedunculi *in summis foliis axillares* 1-*flori, et præterea terminalis alius ramosus, erecti, crassi, villosi, aliquot uncias longi.* Calycis *5-phylli villosi et persistentis foliola 2 exteriora ovata acuta parva; 3 interiora subrotundo-acuminata, ampla, valdè concava.* Pet. *magna, rosea, sæpè rugosula, patentissima.* Caps. *ovata, subpentagona, glabra, 5-valvis: semina numerosissima.* Jacq. loc. cit.

Jussieu has maintained Tourneforte's division of this very natural group into CISTUS and HELIANTHEMUM chiefly upon the ground of the difference in the number of the valves in the capsules of each, and in the substance and extent of the septa or partitions of the same. But in the way he has characterized the two genera, our plant would not find a place in either; to the first he gives an equal calyx, to the last a 3-valved capsule. In our view the group is one of those, which, although numerous, are most advantageously kept under one generic denomination. By dispersing such under new appellations, one use of a generic name, viz. the bringing a well-assorted series of distinct species into our idea by a single word, is nearly defeated to spare a few terms in the definition of the technical character.

The present species, perhaps the most ornamental of the

genus, is native of Teneriffe, and in the Hortus Kewensis said to have been introduced by Mr. Masson in 1779; but in Lamarck's Encyclopedia it is mentioned as having been received at the Paris Botanic Garden from our celebrated countryman, Sherard, a fact which would make it a plant of 40 or 50 years older introduction into this country than is stated in the Hortus Kewensis.

A shrub about 4 or 5 feet high; *stem* branching upright, round, with a reddish ash-coloured bark, branches furred. *Leaves* opposite, oblong, tapered at both ends, acute, furred, reticulately veined, wrinkled and paler underneath like those of Sage, slightly viscid, 3-4 inches long, having a balsamic smell: *petioles* united below, so as to form a striated sheath round the branches, of half an inch in length or more; *floral* leaves with a winged or dilated petiole having little or no sheathing at the base. *Flowers* rose-coloured at the ends of the branches loosely panicled; *peduncles* 1-2-flowered, generally with a *bracte* under the division, lowermost axillary; *pedicles* jointed below, when two, one longer than the other. *Calyx* pubescent, persistent, white and silky within, two outer segments several times smaller. *Petals* cuneately obcordate, large, wrinkled, spreading. *Germen* roundly ovate, pointed, with five raised silky pubescent angles. *Style* higher than the stamens, flexuose, white, thickish. *Stigma* pileately or flattishly headed, granulately roughened, obsoletely 5-lobed.

A hardy greenhouse plant. Flowers about May and June. Propagated by seeds, layers, or cuttings. The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Parson's Green, Fulham.

S. Edwards del. Pub.d by Ridgway & Sons, Sep.r 1, 1817.

AMARYLLIS fulgida.

Stripe-tubed Amaryllis.

HEXANDRIA *MONOGYNIA.*

Nat. ord. Narcissi. *Jussieu gen.* 54. *Div. II.* Germen inferum. Amaryllideæ. *Brown prod.* 296. *Sect. I.*

AMARYLLIS. *Spatha* terminalis, bivalvis rariùs indivisa. *Flores* 1-multi, umbellati, bracteis distincti. *Cor.* erecta ad subcernuam, infundibuliformis ad hexapetalodi-rotatam; *limbo* altiore fauce, sæpè irregulari. *Fil.* glanduloso disco v. summo tubo infra faucem inserta, erecto-divergentia ad fasciculato-declinata, profundiùs inclusa ad subexserta. *Anth.* introrsùm versæ, versatiles, sæpè vibratæ. *Germ.* inferum; *locul.* collaterali-2sperma ad cumulato-polysperma. *Stylus* inclinatus, curvatus. *Stig.* 3, replicata, v. 1 sub3fidum depressum v. apertum. *Caps.* oblata, 3 loba lobis rotundatis, 3-loc., 3-valv., valvis medio septigeris. *Sem.* 2 seriata, globosa ad foliaceo-complanata, raró subariliatìm immersa funiculo crasso fungoso, modò bulboso-laxata, rariùs solitaria: *albumine* carnoso: *embryone* recto.

Bulbus *concentricè tunicatus.* Fol. 1 *ad plurima, bifaria ad multifaria, linearia ad petiolata cum laminâ oblongâ, scapi isocrona v. tardiora. Os tubi sæpè sertulo brevi membranoso fimbriatìm squamatìm v. alitèr fisso v. integerrimo arctè extra basin filamentorum cinctum. Non multùm valet limbi inflexio; cum sæpè solâ directione corollæ pendat; umbellæ enim videndæ in periphæria nutante irregulariflore, in centro erectiore regulariflore.* Nobis in Journ, of science and the arts. 2. 344.

Div. V. Bi-multifloræ. Tubus nudus. Folia bifaria.

A. *fulgida,* 2-pluriflora; foliis oblongo-lanceolatis non glaucis: corollâ nutante rictû obliquo, lacinia summa reflexa latitudine dupla lateralium proximarum; tubo aliquotiès (quatèr?) longiore germine.

Folia *proportione plantæ brevia.* Scapus *teres, glaucus.* Flores 2-4, *inodori:* pedunculis *erectis subsesquiuncialibus.* Cor. *5-uncialis v. ultrà, miniato-micans venoso-striata cum stellâ fauciali chloroleucâ:* tubus *subuncialis, obtusè trigonus, extùs lineolis punctisque fulvis interruptis varius, ut quoquè intùs at ibi parciùs, ore nudo:* faux *contractiùs turbinata, infrà subventricosa:* limbus *patens, recurvus, obliquatus;* lacinia summa media *ovali-lanceolata, tota reflexa, sesquiunciam lata;* laterales summæ 2 *mediam versùs subascendentes, ex unâ quintâ circà breviores, duploque v. ultrà angustiores;* laterales infimæ 2 *summæ mediæ subæquales, imam mediam versùs decurvatæ, margine superiore curviores:* ima media *oblonga æqualis lateralibus superioribus.* Fil. *dilutè miniata, declinato-assurgentia, inæqualia, longiora ¼ ferè breviora limbo.* Germ. *viridans, subturbinatum 3-gonum;* ovulis *albis numerosis in singulo loculo cumulatis.*

The present is the sixth unpublished species of Amaryllis which this work owes to Mr. Griffin. The nearest of its kind are *crocata, rutila, equestris,* and *Reginæ*; but in the first the tube of the corolla is scarcely equal to the

germen, in the second scarcely as long again, while in *fulgida* it is several times longer; in the two next the tube is crowned, in this naked, and its foliage is much shorter than in any of the others. There are several less prominently distinctive features that mark each relatively, and which a comparison of the detailed descriptions will show. The plant had previously flowered in the hothouse of Mr. Herbert's collection at Spofforth, and an umbel of 4 rather larger flowers was produced on it. The bulbs were purchased at Mr. Williams's nursery, Turnham Green; and are said to be from the Brasils.

Leaves oblong-lanceolate, a third shorter than the scape, 2 inches broad. *Scape* round, not glaucous. *Flowers* 2-4, without scent, *peduncles* upright, about an inch and half long or more. *Corolla* more than 5 inches long, and sometimes more than 6 from side to side of the margin of the aperture, of a bright glittering salmon-colour, veiny with a large greenish white faucial star: *tube* about an inch long, variegated on the outside with numerous small broken orange-coloured or tawny stripes and dots, and likewise in the inside, but less thickly so, orifice smooth or not crowned: *faux* contractedly turbinate, somewhat protuberant beneath; *limb* recurvedly patent, slantingly ringent; blade of the upper middle *segment* ovally lanceolate, wholly reflectent, about an inch and half wide; of the two upper lateral ones slightly ascending towards the middle one, nearly a fifth shorter, and twice as narrow; of the two lower lateral ones equal to the upper middle one, slightly declining towards the lower middle one, with a greater curve at the upper margin than the lower; of the lowermost one oblong and equal to those of the upper lateral ones. *Filaments* faintly vermilion-coloured, declined and assurgent, unequal, the longest about ¼ shorter than the limb. *Germen* green, subturbinate; with numerous white flat closely piled *ovula* in each loculament.

Syd. Edwards, del.

Pub.d by Ridgway & Sons, Oct. 1. 1817.

White sc. 14 Brownlow St.

RESEDA odorata. *β. suffrutescens.*
Tree-Mignonette.

DODECANDRIA *TRIGYNIA.*

Nat. ord. Capparides. *Jussieu gen.* 242. *Div. I.* Genera Cappa-ridibus affinia.

RESEDA. *Cal.* 4-6-partitus. *Pet.* hypogyna, 4-6 aut plura, irregularia, nunc omnia trifida, nunc quædam indivisa, supremo ad basin glanduloso gibbo et mellifero. *Stam.* hypogyna, filamentis brevibus, antheris erectis. *Germ.* subsessile; *styli* 3-5, aut 0; *stig.* 3-5. *Caps.* angulata 1-loc. polysperma, receptaculis seminiferis 3-5-angularibus; *sem.* numerosa reniformia; *embryo* incurvus absque albumine. *Herbæ; folia alterna basi 2-glandulosa, indivisa in* Luteolâ *Tourn. et in* Sesamoide *Tourn., partita in* Resedâ *Tourn.; flores spicati terminales; capsula* Resedæ *oblonga prismatica apice retusa,* Luteolæ *brevior profundiùs divisa et quasì 3 rostris,* Sesamoidis *5-partita patens, quasi stellatìm 5-capsularis. Numerus partium varius, constans hiatus capsulæ et glandula petali supremi. Genus à Capparidibus discrepans petalorum et stigmatum numero, cæterùm affine præcipuè embryone.* Juss.

R. *odorata*, foliis integris trilobisque, calycibus florem æquantibus. *Linn. sp. pl.* 1. 646.

Reseda odorata. *Mill. dict. ed.* 8. *n.* 6. *Hort. Kew.* 2. 133. *ed.* 2. 3. 155. *Curtis's magaz.* 29. *Willd. sp. pl.* 2. 881. *Desfont. atl.* 1. 376. *Lamarck encyc.* 6. 162.

R. foliis integris trilobisque, floribus tetragynis. *Mill. ic. tab.* 217.

(β) suffrutescens.

This well-known annual is here presented in the state of a suffrutescent perennial; a form it has been made to assume by appropriate treatment. The species is native of Egypt, and was also found wild by Professor Desfontaines, in the sands near Mascar, on the coast of Barbary. Stated in the Hortus Kewensis to have been first cultivated by Miller in 1752; but, by a MS. note in Sir Joseph Banks's library, we find the seed was sent in 1742 by Lord Bateman, from the Royal Garden at Paris, to Mr. Richard Bateman, at Old Windsor. Professor Desfontaines marks it as annual in his Flora Atlantica; so that it does not seem to be longer lived in its proper climate than here, where advancing winter infallibly destroys it in the open ground.

The plant we have figured was brought by Lady Whitshed from Liége, and given by her to Sir Joseph Banks, under whose observation none had ever fallen in this shape.

Well aware of its specific origin, he was desirous of learning the history of its metamorphose. On referring by letter to M. l'Abbé L'Arbaleste of Liége, from whom Lady Whitshed had obtained the plant, the earliest opportunity was embraced of informing him, that the "Tree-Mignonette" was no novelty in the continental gardens; where it was produced at will by the following treatment: "The plant that it is desired to render a shrub, is placed in a garden-pot, a stick of about 2 feet long inserted by the side, to which it is tied up as it advances in height, the leaves being occasionally stripped from the lower part, that a stem may be formed to the height required; the plant in the mean time is kept in some place where it can be protected from the effects of frost, by which means it is made to last for two or three years. As soon as the seed-vessels begin to ripen they are cut off, and a fresh suit of blossom soon makes its appearance." Sir Joseph has since met with the detail of a similar process recommended for the same purpose in "Le Bon Jardinier," the Gardener's calendar of France; where the plant is known only by the name of "Réséda," that of Mignonette never being applied to it there. Nor have we been able to satisfy ourselves whence it has obtained that appellation with us.

The following is a translation of the Chevalier Lamarck's description of the species. *Stems* partly recumbent partly ascendent, streaked, smooth, tender, green, scarcely angular, sometimes thinly beset with small white hairs, leafy; *leaves* either simple or divided into 2 or 3 lobes, tender, green, and smooth on both sides, obtuse at their summit and cuneately tapered towards their petiole. *Flowers* pedicled, alternate, greenish white; *bractes* small pointed membranous, two thirds at least shorter than the pedicles. *Calyx* persistent, of the same length as the corolla, divided into six linear segments. *Corolla* generally of 6 petals or more, two of which form the upper part of the corolla, these are unguiculate and lightly fringed at their lower part, where they are arched so as to converge over the edge of an orbicular laminar pubescent gland, which forms the basement on which the germen is placed; lateral and lower ones very narrow. *Anthers* brick red. *Capsules* oblong, full of small knobs, terminated by 3 small points.

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a The calyx. *b* A petal. *c* The anthers, as inserted on the round glandular basement of the germen. *d* Germen and its basement.

BRUNSFELSIA undulata.
Waved-flowered Brunsfelsia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SOLANEÆ. *Jussieu gen.* 124. *Div. III.* Genera Solaneis affinia.

BRUNSFELSIA. Cal. campanulatus 5-dentatus brevis. *Cor.* magna infundibuliformis, tubo longissimo, limbo plano 5-lobo subæquali. *Stam.* 5-tum sterile: *anth.* reniformes. *Stylus* 1; *stig.* capitatum. *Bacca* Ceraso major, 1-loc. *ex Linn.* (an potiùs 2-loc.?) polysperma receptaculo seminifero carnoso magno. *Arbuscula; folia alterna; flores solitarii axillares aut plures terminales.* Juss. loc. cit. 127.

B. *undulata,* foliis lanceolato-ovatis utrinque attenuatis, petiolis brevissimis, corollis tubo curvo, limbo undulato. *Swartz prod.* 60.

Brunsfelsia undulata. *Willd. sp. pl.* 3. 269. *Swartz fl. ind. occid.* 2. 1035. *Andrews's reposit.* 167. *Hort. Kew. ed.* 2. 4. 22.

Arbuscula 20-*pedalis, trunco debili lævi;* rami *subreclinati.* Sw. Folia *sparsa, oblongo-lanceolata, obovata v. longiùs deorsùm quàm sursùm attenuata, patentia, glabra, brevè petiolata,* 3-6-*uncialia.* Flores 2-3, *sulphurei, suaveolentes, terminales, erecti, brevè crassèque pedunculati;* pedunc. *æquales v. breviores, calyce lanuginosi.* Cal. ½ *unciæ longus, herbaceus, cylindricus, obsoletè pentagonus, lanuginosus, brevè 5-fidus, inæqualis, lobulis rotundatis, erectis, arctè conniventibus, uno minore.* Cor. *hypocrateriformis;* tubus *citrà* 3 *uncias longus, teres, chloroleucus, lanuginosus, parùm curvatus, pennâ corvinâ crassior, orificio angusto antheris* 2 *obturato;* limbus 3-4-*plo brevior tubo, subbilabiatus, rotatus, antrorsùm obliquatus, disco medio lanuginosus, pro* ¾ *partibus fissus, laciniis subcordato-rotundatis undulatis subæqualibus, supremâ emarginata.* Fil. *alba, inclusa tubo cui supernè inserta at* 4-*plo breviora, erecta, ità basi flexa ut pariete tubi distent;* 2 *breviora:* anth. *verticali-bilobæ oblongæ, luteolæ.* Stylus *æqualis tubo, filiformis, sursùm subcrassior, latere utroque, suturâ notatus quasì ex binis conferruminatis confectus:* stig. *capitatum, antrorsùm obliquatum, suturâ transversâ prominulâ striarum styli utrorsùm continuâ:* germ. *ochroleucum, ovato-pyramidatum, glabrum, longitudine penè calycis.*

Found by Swartz in thickets, on the mountains of the southern part of Jamaica, where it is said to form a tall shrub of nearly 20 feet in height, but with a feeble stem. Introduced about 1780, according to the authority of the Banksian Herbarium. Received from Barbadoes by Messrs. Lee and Kennedy in 1784. It must be kept constantly in the tan-bed of the hothouse, and will flower freely about June. Propagated by cuttings. We have never met with any specimens more than 4 or 5 feet in height. The bloom is handsome and very sweet.

In Brunsfelsia *americana* the leaves are shorter and broader than here, the peduncles twice the length of the calyx, here scarcely equal to it; the calyx is patent and not cornered, here connivent and pentagonal; the tube of the corolla is about 2 inches long, here 3; the limb more decidedly bilabiate and quite even, here undulate. The flowers of *americana* have a much stronger scent, but less fragrance than those of *undulata*.

The drawing was taken at the nursery of Messrs. Colvilles, in the King's Road, Chelsea.

Leaves scattered, oblong-lanceolate, obovate or tapered downwards farther than they are upwards, patent, smooth, shortly petioled, 3-6 inches long. *Flowers* 2-3, terminal, sulphur-coloured, upright; *peduncles* thick equal to or shorter than the calyx, covered with a short nap or down. *Calyx* about the third of an inch long, herbaceous, cylindrical, obtusely pentagonal, downy, shallowly 5-cleft, unequal, lobules rounded, upright, connivent, one smaller than the rest. *Corolla* hypocrateriform; tube above 3 inches long, of a greenish sulphur-colour, round, downy, slightly curved, thicker than a crow-quill, with a narrow orifice nearly closed by the anthers of the two longest stamens; *limb* 3-4 times shallower than the tube, subbilabiate, rotate, slanting forwards, downy at the inner disk, cleft for about $\frac{3}{4}$ of its depth, segments subcordately round, waved, nearly equal, uppermost one emarginate or notched. *Filaments* white, enclosed within the tube, in the upper portion of which they are inserted, 4 times shorter than that, bent at the base and projecting from the wall of the tube; two shorter: *anthers* vertically two-lobed, and long in the same direction, yellowish. *Style* equal to the tube, filiform, slightly thickened upwards, seamed on each side and appearing as if formed of two united: *stigma* capitate slanting forwards, with a transverse seam, which is connected each way with the seams of the style: *germen* whitish green, ovate, tapered, smooth, nearly the length of the calyx.

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Syd. Edwards. del.

White sc. 14 Brownlow St.

Pub.d by Ridgway & Sons, Oct.r 1. 1827.

MARICA gladiata.
Hairy-stalked Marica.

TRIANDRIA *MONOGYNIA.*

Nat. ord. ENSATÆ. *Linn. Ord. nat. VI. Nobis in Ann. of Bot.* 1. 219.

IRIDES. *Jussieu gen.* 57. IRIDEÆ. *Brown prod.* 302.

MARICA. Spatha communis bivalvis *partiales* simplices 1-floras includens, rariùs ex plurifloris composita; *valvæ* equitantes, *exterior* major sæpèque foliaceo-producta. *Cor.* supera hexapetalo-partita, rotata, nunc infrà brevè urceolata; laciniis subæqualibus conformibus, v. inæqualibus alternis difformibus. *Stylus* brevis, 3-queter: *stig.* 3, angustè petaliformia bilabiata coadunata, v. subulata distincta. *Stam.* istis alterna; *fil.* omninò monadelpha ad omninò distincta: *anth.* erectæ, coadunatorum stigmatum angulos equitantes, distinctorum lateribus intersertæ. *Caps.* globosa ad columnarem, rotundatè trigona, 3-loc., 3-valv. valvis septigeris: *sem.* 2-seriata; margini internæ septi utrinque annexa, globosa, oblonga, modò pressione angulosa: *testa* fusca, punctis scabrata; *alb.* corneum.

Radix *fibrosa perennis, in plicati foliis tunicato-bulbosa.* Fol. *collaterali-disticha, ensiformia, interdùm plicata, raro convoluto-fistulosa.* Scapus *anceps, v. foliaceus, v. teres.* Spathæ *solitariæ terminales, rariùs numerosæ in spicam distinctæ.* Cor. *decidua, involuto-emarcescens.* Caps. *apice vestigio corollæ marginato-umbonata. Nunc ubì scapus à valvâ inferiori spathæ continuatur, flores quasì laterales. In* IRIDE *et* MORÆÂ *applicantur stamina faciebus interangularibus stigmatum v. istis bipartitis interseruntur, verbo illic opponuntur hìc in* MARICÂ *alternantur stigmatibus. In* ARISTEÂ *corolla persistens denuoque in spiram contorta, stylus longus, sæpiùs inclinatus, stigma v. simplex hians v. triplex lobis dilatatis, germen prismaticum ovulis sæpiùs uniseriatis.*

Div. Spatha communi composita. Bobartiæ. *Australi-Africanæ.*

M. *gladiata*, foliis lineari-ensiformibus striatis hinc convexiusculis, scapo ancipiti, pedunculis villoso-canescentibus.

Moræa gladiata. *Thunb. mor. n.* 8. *Willd. sp. pl.* 1. 241. *Vahl enum.* 2. 155.

Ixia gladiata. *Linn. suppl.* 93.

Herba *perennis, radice fibrosa.* Folia *plura, collaterali-disticha, basi equitantia, lineari-ensiformia, erectiuscula, angusta, striata, subglauca, pedalia v. plurimùm longiora.* Scapus *anceps, compressus, linearis, aphyllus, enodis, striatus, hinc ex acie curvo-inclinatus, æqualis foliis v. longior, rigidiusculus.* Spatha communis *terminalis, bivalvis, composita, rigens, equitans, pluriflora,* valvis *lanceolatis, complicatis, exteriore scapi continuâ, nuncque ità longè ultra flores productâ ut compareant isti quasi sinû laterali scapi exserti essent, modò interiorem divergentem parum exsuperante:* partiales *subtrinæ plurivalves 1-2-floræ.* Pedunculi *æquales spathis partialibus, villoso-albicantes, robusti, subancipites, recti, fructiferi productiores.* Germ. *viride, læve, nitens, aliquotiès brevius corollâ, oblongum, obtusè trigonum, estriatum, exsulcum, polyspermum.* Cor. *imbricato-stellata, lutea, medio disco punctis rubris parcè irrorata, 2 uncias transversa, subæqualis;* laciniis *ovali-lanceolatis lineâ tenuissimâ per medium ductâ, exterioribus dorso fulvescentibus v. fuscescentibus, interioribus vix latioribus ellipticis obtusioribus striâ brevi fuscâ imo*

medii dorsi. Stam. *subduplo breviora corollâ, erecto-patula ;* fil. *disco incrassato infixa, omninò distincta, crassiuscula, compressa, ancipitia, subulata, firma, plùs duplo breviora antheris, luteola :* anth. *erectæ, subconniventes, sagittato-lineares, fissurâ baseos infixæ, rigidæ, ⅓ unciæ circà longæ ;* pollen *subgrumosum vitellino-flavum.* Stylus *plùs duplo brevior filamentis, robustus, triqueter, deorsùm angustatus :* stig. *3-plo v. ultrà longiora stylo, divaricata, compresso-subulata, albida, stricta, latere interiore rimâ brevi pubescente terminata.*

A species, in as far as we can discover, now first introduced from the Cape of Good Hope by Messrs. Lee and Kennedy, of the Hammersmith nursery, where the drawing was made in July. We have never met with it in any Herbarium except in that of Mr. Burchell. It seems to have entirely escaped the late Mr. Masson during his long and extensive search at the Cape in quest of plants. In a tract on the *Ensatæ*, published some years ago in the Annals of Botany, we had purposely omitted this species, along with 3 other closely kindred ones, in the enumeration of that genus; and the inspection of the present plant satisfies us that we were right in so doing. These species are branches of the type of MARICA and not of that of MORÆA.

In MORÆA and IRIS the stamens are opposite to the space between the stigmas, when these are petalshaped, or inserted between the segments into which these are cleft, when not petalshaped. But in MARICA the stamens are opposite to the angles formed by the connivent edges of the stigmas, when these are petalshaped, or are inserted between them when they are not petalshaped; in short, the stamens are alternate with the stigmas in MARICA, but opposite to them in MORÆA and IRIS. Differences that are accompanied by others in the habit of the respective plants.

We do not know how it has happened, but there are certain species of the ENSATÆ, with showy bloom and of curious structure, common in the neighbourhood of the town at the Cape of Good Hope, which do not appear ever to have been introduced into any European garden, or at least not to have flowered there; such as MARICA *spathacea*, one so abundant in its native land as frequently to embarrass the way of the traveller by its long tough entangled foliage; ANTHOLYZA *lucidor*, SPARAXIS *pendula*, MORÆA *plumaria*, and others. BABIANA *ringens*, the most curious and splendid flower of the tribe at the Cape, does not appear

in the works of Jacquin, so rich in the Ensatæ of those regions, nor have we ever heard of its being in any garden, although enumerated in the Kew Catalogue.

The present species is a fibrous-rooted evergreen perennial. *Leaves* edgewisely-distich, linearly ensiform, narrow, slightly glaucous, a foot or much more in length, slightly convex at one of the sides. *Scape* ancipital, flat, linear, leafless, without joint or knot, streaked, inclined edgeways, equal to or longer than the leaves, stiffish as the whole plant is, except the flower. *General spathe* terminal, bivalved, compound, equitant, several-flowered, *valves* lanceolate and folded, the outer one appearing like a continuation of the scape, and is sometimes carried on a considerable length beyond the flowers, when these appear like lateral ones; but it is also often not much longer than the inner divergent one: *partial spathes* about 3, several-valved, with 1 or 2 flowers. *Peduncles* even with the partial spathes, villous, white, somewhat robust. *Germen* green, smooth, several times shorter than the corolla, oblong, obsoletely three-cornered, unfurrowed, many-seeded: *corolla* imbricately stellate, yellow, thinly sprinkled with purple dots round the centre, about two inches over, nearly equal; *segments* ovally lanceolate, exterior ones of a reddish brown at the back, interior one scarcely broader but more bluntly pointed with a short brown streak at the lower part of the middle of the back. *Stamens* about twice shorter than the corolla, upright; *filaments* fixed in the thicker centre, quite separate, thickish, ancipitally compressed, subulate, firm, yellowish, more than twice shorter than the anthers: *anthers* uprightly connivent, sagittately linear, inserted at the notch in the base, stiff, ⅓ of an inch long; *pollen* deep yellow or orange. *Style* more than twice shorter than the filaments, robust, triquetral, tapered downwards: *stigmas* three times longer than the style or more, divaricate, compressedly subulate, whitish, straight, stiff, with a short pubescent fissure at the end of the inner edge.

We had an opportunity of inspecting a considerable number of the native specimens of this species in Mr. Burchell's Herbarium.

MARICÆ SPECIES.

I. Stigmatibus petaliformibus coadunatis. Maricæ v. Cipuræ. *Australi-Americanæ.*

Northiana. *nobis in Curt. Magaz.* 654.
martinicensis. *nobis in annals of bot.* 1. 245. Iris. *Curt. Magaz.* 416.
paludosa. *Curt. Magaz.* 646.
humilis. *nobis.* Cipura. *Kunth nov. gen. et spec.* 1. 257.
graminea. *nobis.* Cipura. *Kunth nov. gen. et spec.* 1. 257.

II. Stigmatibus subulatis distinctis. Sisyrinchia. *Australi-et Boreali-Americanæ.*

plicata. *nobis in Curt. Magaz.* 655.
palmifolia. *nobis.* Sisyrinchium. *Linn. mant.* 122; *(excl. syn.)*
striata. *nobis in Curt. Magaz.* 701.
Bermudiana. *nobis.* Sisyrinchium *iridioides. Curt. Magaz.* 94.
anceps. *nobis.* Sisyrinchium *gramineum. Curt. Magaz.* 464.
cathartica. *nobis.* Bermudiana Narcisso-Leucoji flore, vulgò Thekel-Thekel. *Feuillée peruv.* 3. 9. *t.* 4.
mucronata. *nobis.* Sisyrinchium. *Pursh amer-sept.* 1. 31.
convoluta. *nobis.* Sisyrinch. *Willd. hort. berol.* 91.
tenuifolia. *nobis.* Sisyrinch. *Id. l. c.* 92.
bogotensis. *nobis.* Sisyrinch. *Kunth nov. gen. et sp.* 259.
pusilla. *nobis.* Sisyrinch. *Id. l. c.*
tinctoria. *nobis.* Sisyrinch. *Id. l. c.* 260.
iridifolia. *nobis.* Sisyrinch. *Id. l. c.*
californica. *nobis in Curt. Magaz.* 982.

III. Spatha composita, stigmatibus subulatis distinctis. Bobartiæ. *Australi-Africanæ.*

gladiata. *nobis in loco præsenti.*
aphylla. *nobis.* Moræa. *Thunb. mor. n.* 9. *t.* 2.
filiformis. *nobis.* Moræa. *Id. l. c. n.* 11. *t.* 1.
spathacea. *nobis.* Moræa. *Id. l. c. n.* 11. *t.* 1. Bobartia indica *Linn. zeyl. n.* 41.

White sc. 14 Brownlow St. Holborn

HIBISCUS phœniceus.

Small purple-flowered Hibiscus.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. III.* Stamina indefinita. Fructus simplex multilocularis.

HIBISCUS. *Suprà vol.* 1. *fol.* 29.

H. *phœniceus*, foliis ovatis acuminatis, serratis, inferioribus subcordatis tricuspidatis, pedunculis articulatis, seminibus lanatis. *Willd. sp. pl.* 3. 813.

Hibiscus phœniceus. *Linn. suppl.* 310. *Jacq. hort. vindob.* 3. 11. *t.* 14. *Cavan. diss.* 3. 157. *t.* 67. *f.* 2. *Hort. Kew. ed.* 2. 4. 225.

Frutex *ex radice ramosâ* caulem *promit erectum teretem lignosum, calami et majore crassitie, leucophæum, juniorem virentem, glabrum, à* 3 *ad* 6 *pedes altum, lentum, tandèm ex longitudine debilem:* rami *virgati, teretes, virides, vix notabili asperitate donantur.* (Jacq l. c.) Fol. *sparsa, distantia, ovato-acuminata, obscurè virentia hirtiuscula, longiora subsesquiuncialia, crenato-serrata, (modò inæqualitèr magis minùsve versus inferiora triloba* Jacq.) petioli *subunciales, villosi, propè laminam cum genû crassiore flexi.* Pedunculi *axillares, solitarii,* 1-*flori, sublongiores foliis, pilis raris hispidiusculi, patuli, teretes, biunciales v. ultrà, stricti, supra medium at longè infra florem nudo-articulati, indèque crassiores.* Cal. exterior 9-*phyllus, radiato-patens, æqualis interiori, obscurè virens, asperiusculus, foliolis angustissimis, lineari-subulatis:* interior *pallidior, membranaceus, ultra medium* 5-*fidus, campanulatus, villoso-ciliolatus, segmentis lanceolatis cuspidatis* 3-*nerviis.* Cor. *punicea, explanato-patens, sesquiunciam transversa, exsuperans calycem;* pet. *oblongò-cuneata, apice rotunda v. subretusa, basi in tubum obtegentem germen connata.* Germ. *tectum, ovatum, pallidè virens, villosum.* Tubus stamineus, *declinatus, corollæ concolor, penè de basi ramuloso-antheriferus:* anth. *rotundæ, vitellinæ vel aurantiacæ.* Styli 5, *punicei, filiformes, æquales corollæ, tandèm reflectendi ut stigmata admoveantur antheris pro polline excipiendo:* stig. *capitata.*

Phœniceus and *hirtus* are now generally included in the same species as varieties. We have however omitted the synonymy of the latter, as we have not had an opportunity of comparing the two in the living plant. Jacquin tells us that he brought the seed of the specimen he treats of, in the place we have cited, from South America, without saying that it was indigenous of that country. By every one else the species is spoken of as a native of the East Indies. Requires to be kept in the stove, where it will produce a succession of bloom nearly the summer through. Introduced by Sir Joseph Banks in 1796.

Stem woody, round, upright, as thick as or thicker than a common sized pen, the young part green, from three to six feet high, bending as it lengthens; branches wandlike, round, green, very slightly roughened. *Leaves* scattered, distant, ovately acuminate, dark green, roughishly pubescent on both sides, serrate, longer ones about an inch and half long, lower ones sometimes more or less three-lobed: *petioles* about an inch long, villous, bent near the blade, thickened at the knee. *Peduncles* axillary, one-flowered, solitary, as long or rather longer than the leaves, thinly and hardishly pubescent, upright, slightly spreading, straight, round, 2 inches long or more, with a joint above the middle, yet much below the flower, and from thence upwards thickened. *Outer calyx* 9-leafletted, radiately spreading, equal to the inner one, dark green, roughish, leaflets very narrow, linearly subulate: *inner one* paler, membranous, cleft to below the middle, campanulate, villously edged, segments lanceolate, pointed, 3-nerved. *Corolla* crimson, flatly expanded, about $1\frac{1}{2}$ inch over, longer than the calyx; *petals* oblong, cuneate, rounded or subretuse, connate at the base into a tube which encloses the germen. *Germen* covered, ovate, pale green, villous. *Stamineous tube* inclined, of the colour of the corolla, shortly branched and antherbearing nearly from the very base: *anthers* round, orange-coloured. *Styles* 5, filiform, equal to the petals, bending back, that their stigmas may be placed in contact with the anthers: *stigmas* capitate.

The drawing was made at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Fulham.

HIBISCUS pedunculatus.

Long-stalked Cape Hibiscus.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. III.* Stamina indefinita. Fructus simplex multilocularis.
HIBISCUS. Suprà vol. 1. *fol.* 29.

H. *pedunculatus*, foliis 5-3-lobisve, obtusis crenatis hirsutis, pedunculis axillaribus foliis duplo longioribus, corolla campanulata. *Willd. sp. pl.* 3. 827.

Hibiscus pedunculatus. *Linn. suppl.* 309. *Thunb. prod.* 118. *Cavan. diss.* 3. 163. *t.* 66. *f.* 2.

Frutex *bipedalis, erectus, ramis teretibus viridibus hirtiùs villosis.* Folia *alterna, distantia, obscurè viridia, ex pilis subcompositis hirsuta, subcordato-rotunda, triloba (inferiora quinqueloba* Thunb.), *dentata, sesquiunciam plùs minùs lata, firmula, suprà immersè subtùs elevatè nervosa; lobi distantes, apice rotundati, medius longior, cuneato-oblongus, brevè subacuminatus vel nunc retusus:* petioli *breviores laminâ, stricti, patentes, filiformes:* stipulæ *subulatæ, exiguæ, sphacelatæ, caducæ.* Pedunculi *supernè in ramis axillares, solitarii, filiformes, stricti, triunciales, erecti, paulò infrà calycem articulati atque geniculato-flexi.* Cal. *duplex:* exterior *virens,* 8-9-*phyllus, parùm brevior interiori, campanulatus, foliolis linearibus angustis acutis hirto-villosis carinatis:* interior *subsemi5-fidus, parùm excedens tertiam partem unciæ, pallidior, pilis penicellatis v. stellatis pubescens, segmentis lanceolatis carinato-uninerviis.* Cor. *rosea, nutans, obconico-campanulata, paulò infrà 2 uncias longa, extùs villosiuscula et nervosa, subinæqualis obliquè patula, laciniis obovato-v. cuneato-oblongis, apice obliquato-rotundis, subretusis cum mucronulo, unâ infimâ majore.* Tubus stamineus *pallidè roseus,* $\frac{1}{5}$ *brevior corollâ, supernè versùs interruptè staminiferus;* fil. *vaga, dissita, sæpè binata, brevia:* anth. *subrotundæ;* pollen *è sphærulis incarnatis granulosum.* Styli 5, *tubum stamineum superantes, rosei:* stig. *globosa, pilosa, pallidè rosea.*

Introduced subsequently to the publication of the last edition of the Hortus Kewensis, and not represented by any figure from the living plant. A native of the Cape of Good Hope, where it was observed by Thunberg growing in the woods at a place called Galgebosche. It forms a very ornamental greenhouse-plant, and blossoms freely about July. The beauty of its large rose-coloured flowers is greatly enhanced by the dusky green of the foliage.

An upright shrub, in the specimen we saw little more than 2 feet high, with round green roughly furred branches. *Leaves* alternate, distant, dark green, hirsute, subcordately round, 3-lobed, toothed, an inch and half (more or

less) across, firm, nerved, the nerves sunk at the upper side, prominent at the under, lobes standing rather widely asunder, rounded at the points, the middle the longest and cuneately oblong, sometimes shortly acuminated, sometimes retuse with a small middle point, pubescence subcompound: *petioles* shorter than the blade, patent, stiff, filiform: *stipules* very small, subulate, sphacelate, caducous. *Peduncles* axillary in the upper part of the branches, solitary, filiform, upright, straight, about 3 inches long, jointed a little below the calyx and bent forwards. *Calyx* double: *outer one* green, 8-9-leaved, but little shorter than the inner, campanulate, leaflets narrow, linear, sharp-pointed rough-furred, keeled: *inner* about halfway-fivecleft, little more than the third of an inch deep, paler, beset with pencilled or stellate hairs, segments lanceolate with an exteriorly prominent midrib. *Corolla* rose-coloured, nodding, obconically campanulate, nearly two inches deep, slanted at the orifice, somewhat unequal, villous and nerved on the outside, segments obovately or cuneately oblong, slantingly round at the top, somewhat retuse with a small point, lowermost one the largest of all. *Stamineous tube* pale rose-colour, about $\frac{1}{5}$ shorter than the corolla, interruptedly staminiferous upwards, *filaments* irregularly placed and rather wide apart, often in pairs, short: *anthers* roundish, *pollen* consisting of small flesh-coloured globules. *Styles* fine, longer than the stamineous tube, rose-coloured: *stigmas* capitate hairy pale-rose-colour.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Fulham.

HIBISCUS tiliaceus.

Lime-tree-leaved Hibiscus.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. III.* Stamina indefinita. Fructus simplex multilocularis.
HIBISCUS. Suprà vol. 1. *fol.* 29.

H. *tiliaceus* foliis subrotundo-cordatis acuminatis crenatis, caule arboreo, calyce exteriore 10-dentato. *Willd. sp. pl.* 3. 810.
Hibiscus tiliaceus. *Linn. sp. pl.* 2. 976. *Cavan. diss.* 3. 151. *t.* 55. *f.* 1. *Hort. Kew.* 2. 454. *ed.* 2. 4. 225. *Loureir. cochinch.* 418.
Hibiscus tiliæfolius. *Salisb. paradis.* 94.
Malva arborea maritima, folio subrotundo minore acuminato subtùs candido, cortice in funes ductili. *Sloan. jam.* 1. 215. *t.* 134. *f.* 4.
Althæa maritima arborescens diffusa, foliis orbiculato-cordatis crenatis subtùs cinereis. *Browne jam.* 284.
Novella. *Rumph. amb.* 2. 218. *t.* 73.
Pariti s. Tali pariti. *Rheede mal.* 1. 53. *t.* 30.
Alcea indica sinarum, flore luteo malvaceo. *Pluk. amalth. t.* 355. *f.* 5.
Ketmia indica, tiliæ folio. *Tourn. inst.* 100.

Frutex *biorgyalis v. ultrà, erectus, ramosus, trunco crassissimo.* Fol. *decrescentia, suprà obsoletiùs pubescentia virentia, subtùs tomentoso-albicantia, varicoso-nervosa, rimâ glandulosâ longitudinali basi nervi principis incisa:* petioli *villosi breviores laminâ:* stipulæ 2, *magnæ, ovatæ v. parabolicæ, obtusæ, erectæ.* Pedunculi *supernè in ramis axillares, solitarii, crassi, longitudine ferè calycis interioris, teretes, curvati, pube brevi densâ tecti.* Cal. exterior *interioris basin arctè cingens, pluriès brevior,* 9-10-*partitus, foliolis ovato-acuminatis, omnino ac pedunculus pubescens.* Cal. interior ¼ *parte unciæ altus, campanulatus, ultra medium 5-fidus, segmentis oblongo-lanceolatis, villosis, sub3nerviis, acumine obtusulo.* Cor. *campanulato-rotata,* 4 *uncias transversa, nervoso-striata, flava fundo intùs puniceo, externè hirtiùs villosa;* pet. *basi brevè connexa, spathulato-rotunda, ungue breviore cuneato-angustato, laminâ obliquè orbiculata cum latere uno majore.* Tubus stamineus *flavescens fermè duplo brevior corollâ, ad usque ultrà medium integer, indè in filamenta brevia ramulosè fissus:* anth. *reniformes, pallidæ.* Stig. 5, *oblonga, cylindrica, atro-sanguinea, erecto-patentia, molli-muricata.*

A common shrub throughout the East Indies, growing in almost every soil and situation, but thriving most on the sea-shore. Described as sometimes acquiring a stem of 20 feet in height, and of a greater circumference than a man can encircle with his arms. The smaller kinds of cordage are made from its bark. It is also said to be indigenous of the West Indies; and Mr. Salisbury thinks that the *elatus* of Swartz is a variety of it.

Cultivated by Miller in 1731. The seed that produced the plant from which the drawing was made, was sent from India by Lady Gwyllim to Messrs. Whitley, Brames, and Milne, of the Fulham nursery.

A branching arborescent shrub. *Leaves* decrescent upwards, roundly cordate, acuminate, more or less crenated, obsoletely pubescent at the upper side and green, on the under tomentose whitish and varicosely nerved, the principal nerve having a longitudinal linear glandularly edged incision at its base: *petioles* villous shorter than the blade: *stipules* large, sometimes nearly ovate sometimes parabolical round pointed, villous, upright, caducous. *Peduncles* on the upper parts of the branches, axillary, solitary, thick, scarcely longer than the interior calyx, round, curved, with a short close plush-like pubescence. *External calyx* enveloping closely the base of the internal one, several times shorter than that, 9-10-parted, leaflets ovately acuminate, covered with precisely the same kind of pubescence as the peduncle and of the same colour. *Internal calyx* about ¾ of an inch deep, campanulate, five-cleft to below the middle, segments oblong, lanceolate, villous, generally 3-nerved, obtusely pointed. *Corolla* campanulately rotate about 4 inches across, nervedly streaked, deep yellow, with a large dark crimson spot on the inside at the bottom, externally roughishly villous: *petals* shortly connected at their bases, spatulately round, unguis cuneately narrowed, shorter than the obliquely rounded unequal-sided lamina. *Stamineous tube* yellow, nearly twice shorter than the corolla, entire or naked nearly to the middle, then beset by or divided into short and sometimes branching filaments: *anthers* reniform, pale. *Stigmas* 5, oblong, cylindrical, deep crimson, upright, spreading, softly muricated.

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PASSIFLORA adiantifolia.
Norfolk Island Passionflower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in Annales du Muséum.* 6. 102.
PASSIFLORA. *Suprà vol.* 1. *fol.* 13.

P. *adiantifolia,* foliis basi rotundato-truncatis, levitèr 3-5-lobis, lobis obtusis, petiolis eglandulosis, petalis calyce brevioribus. *Willd. enum.* 698; *(sub* P. Adiantum).
Passiflora adiantifolia. *Miss Lawr. passionfl.*
Passiflora glabra. *Wendland collect.* 1. 55. *tab.* 17.
Passiflora Adiantum. *Willd. enum.* 698.
Passiflora aurantia. *Andrews's reposit.* 295. *Hort. Kew. ed.* 2. 4. 153; *(non tamen Forsteri, Cavanillesii, aut Willdenovii).*

Frutex *altè scandens,* caule *glabro ramoso;* ramis *gracilibus subangulosostriatis viridantibus.* Folia *alterna, transversè latiora, rotundatè* 3*-loba v. sæpè ob lobos iterùm incisos* 5*- v. pluriès lobata, trinervia subtùs tenuissimè reticulata et sæpè nodulis glandulosis vagis notata, basi rotundata, juniora subrhombea;* petiolus *ferè duplo brevior, eglandulosus flexus:* stipulæ *minutè subulatæ caducæ.* Cirrhi *axillares spirales longissimi.* Pedunculi *solitarii, axillares,* 1*-flori, longitudine ferè petioli at plurimùm crassiores, duriusculi, flexi, teretes, glabri, parùm suprà medium articulati,* bracteis 3 *sparsis minimis subulatis rubidis caducis stipati.* Flores *sesquiunciam profundi, patentes, inodori, primò ochroleuci, indè lateritio-rubentes.* Calyx *crassiusculus, infernè brevè urceolatus, toroso-angulatus;* segmenta *angustiùs oblongata, elevato-carinata, margine reflexo, apice obtuso brevè inflexo.* Coræ pet. *summo tubo calycis imposita, segmentis calycinis* ⅓ *parte v. circà breviora, ferè duplo angustiora, lanceolato-oblonga, tenuia, obtusa, tenera, patentia.* Corona *duplex, duplo brevior corollâ, æqualis;* exterior *erecto-radiata, basi corollæ inserta, radiis setaceis rigidis obtusis numerosis luteo-viridantibus interiori adstantibus:* interior *(v.* operculum) *ovato-tubulosa, plicato-rugosa, erosodentata, viridis,* 3*-plo brevior columnâ:* nectarium *in fundo calycis, septo nullo divisum, luteo-virens.* Columnæ stipes *æqualis calyci, rotundatè triqueter, viridis,* 3*-plo vel ultrà longior filamentis, strictus:* fil. *filiformia, viridia, æqualia stylis, divergentia:* anth. *verticali-appensæ, vibratiles virides, sagittato-lineares, breviores filamentis.* Germ. *oblongum, ovale, viride, glabrum, obsoletè trigonum:* styli *filiformes, virides, patentes:* stig. *obliquè capitata, viridia.*

Referred to the *aurantia* of Forster in the late edition of the Hortus Kewensis. But that species is native of New Caledonia, and has two distinct and prominent glands on the upper part of the petioles, conspicuous even in the dried specimen deposited by Forster in the Banksian Herbarium. The present is native of Norfolk Island, and has no glands on the petioles. The leaves in *aurantia* have

a much longer middle lobe, and the side ones are never divided or deeply indented. We have therefore no hesitation in separating them. Mr. Brown informs us that there are two other species in New Holland, closely akin to these, with flowers of the same colour.

Adiantifolia is a tall climbing greenhouse plant, with a smooth branching stem; branches somewhat angular, green. *Leaves* alternate, of a lively green, smooth, broader than long, 3-lobed, and when the side lobes are indented with the appearance of being 5 or more lobed, 3-nerved, not unfrequently with several scattered glandular nodules on their under surface, reticulately veined, rounded at the base, lobes obtuse: *petiole* about twice as short as the blade, bent, glandless. *Stipules* minute, subulate. *Tendrils* axillary, long, spiral. *Peduncles* solitary, axillary, one-flowered, about the length of the petioles but much thicker, round, bent, smooth, jointed a little above the middle, furnished with three very small subulate, distantly placed *bractes*. *Flowers* about an inch and half deep, scentless, patent, at first of a whitish buff colour, then turning to a kind of brick-red. *Calyx* thickish, shallowly cupped below, angularly-torose; *segments* narrowishly oblong, deeply keeled, with a reflectent margin, and short blunt inbent point. *Petals of the corolla* inserted at the rim of the tube of the calyx, about one third shorter than that and nearly twice as narrow, lanceolately oblong, thin, tender, obtuse, patent. *Crown* double, twice shorter than the corolla, equal; *outer one* of upright numerous bristleshaped blunt pointed one-ranked yellowish green rays, which stand close to the inner crown; *inner crown or operculum* ovately tubular, plaitedly wrinkled, erosely dentate, green, 3 times shorter than the column: *nectary* in the shallow cavity at the bottom of the calyx, without any partition. *Shaft of the column* equal to the calyx, green, upright: *filaments* green filiform, equal to the styles; *anthers* sagittately linear green. *Germen* oblong, smooth, green: *styles* filiform, green: *stigmas* obliquely capitate, green.

Introduced in 1792 by Messrs. Lee and Kennedy, of the Hammersmith nursery.

The drawing was taken at Messrs. Whitley, Brames, and Milne's, in the King's Road, Parson's Green, in July.

AMARYLLIS equestris. *β. major.*

Large Star-flowered Amaryllis.

HEXANDRIA *MONOGYNIA.*

Nat. ord. Narcissi. *Jussieu gen.* 54. *Div. II.* Germen inferum.
Amaryllideæ. *Brown prod.* 296. *Sect. I.*
AMARYLLIS. Suprà fol. 226.

Div. IV. Bi-multifloræ. Tubus coronatus. Folia bifaria.

A. *equestris,* (tubo fimbriato) 2-3-flora, pedicellis spatha erecta brevioribus, tubo filiformi horizontali, limbo obliquè patulo, sursùm curvo. *Hort. Kew.* 1. 417.

(α) minor.

Amaryllis equestris. *Jacq. hort. schœnb.* 1. 33. *t.* 63. *Curtis's magaz.* 305. *Willd. sp. pl.* 253. *Redouté liliac.* 32. *Hort. Kew. ed.* 2. 2. 224. *Nobis in Journ. of scien. and the arts.* 2. 354.

Amaryllis dubia. *Linn. amœn. acad.* 8. 254.

Lilium americanum puniceo flore Belladonna dictum. *Herm. parad.* 194. *t.* 194.

Lilium rubicundum. *Merian surinam. t.* 22.

(β) major. *In loco præsenti.*

(γ) plena. *In hortis sub nomine* Amaryllidis pulcherrimæ?

Folia *subquaterna, lanceolato-lorata, æqualia vel breviora scapo, unciam ad sesquiunciam lata.* Scapus 1-2-*pedalis, glaucus, teres, fistulosus.* Spatha *lanceolata, erecta, æqualis pedunculis.* Pedunculi *stricti, teretes, maximum triunciales.* Flores *inodori, miniati, striati,* 3-5-*unciales v. ultrà.* Tubus 1-*sesquiuncialis, calamum crassus v. duplo crassior, deflexus:* faux *patens, stellâ chloroleucâ notata.* Limbus *deflexus concolor, rictû obliquè divaricato.* Stamina *fasciculata, declinata. In β* majore *barba densior longiùs inserpit fauce quàm in α* minore.

The smaller variety of this species has been long known in our collections, and represented in various works, as is shown by the synonymy. But the present we do not find any where noticed. Mr. Griffin, who contributed the specimen from which the drawing was made, takes it to be the parent of the double Amaryllis, which was imported a few years since by Messrs. Frasers, and well known among gardeners by the appellation of *pulcherrima.* Its bulbs were received by Mr. Griffin, a short time ago, from Guadaloupe. The main difference between it and the other variety seems to consist in this being more than twice the size of that, and in having a pubescence at the orifice of the tube of much greater breadth.

We should scarcely have thought it necessary to observe, that the specific name had been suggested by a fancied resemblance in the front appearance of the corolla to a star of some of the orders of knighthood; had we not known that a very different version of the same has been given in another place.

Leaves about four, lanceolately lorate, equal to or rather shorter than the scape, from one inch to an inch and half broad. *Scape* from one to two feet high, columnar, glaucous, hollow. *Spathe* lanceolate, upright, equal to the peduncles. *Peduncles* upright, round, about 3 inches long. *Flowers* without scent, of various shades of vermilion, sometimes inclining to a pink, sometimes to an orange hue, especially in the smaller sort. *Tube* deflectent, from an inch to an inch and half long, of the thickness of a common pen, or of twice that thickness; *faux* spreading, marked with a large whitish six-pointed star. *Limb* deflectent, obliquely ringent, upper lip reflectent. *Stamens* fasciculate, declined.

Both varieties require to be kept in the hothouse, where they flower freely.

Watts sc. 14 Brownlow St. Holb.

ORNITHOGALUM niveum.

Snowy Star-of-Bethlehem.

HEXANDRIA *MONOGYNIA.*

Nat. ord. Asphodeli. *Jussieu gen.* 53. *Div. IV.* Flores spicati. Radix bulbosa. Corolla sexpartita, basi staminifera.

ORNITHOGALUM. *Suprà vol.* 2. *fol.* 158.

O. *niveum*, racemo paucifloro, petalis lanceolatis, foliis filiformibus canaliculatis, filamentis subulatis. *Solander in Hort. Kew.* 1. 440.
Ornithogalum niveum. *Willd. sp. pl.* 2. 115. *Hort. Kew. ed.* 2. 2. 257.
Ornithogalum graminifolium. *Thunb. prod.* 61?
N°. 3367, *Burchell catal. herb. afric. ined.*

Bulbus *tunicatus, oblato-sphæricus, lævis, virescens, diametro vix* ¼ *partium unciæ.* Fol. *radicalia, pauca (subquaterna) filiformi-attenuata, canaliculata, tenaciùs graminea, nec carnosa, erecto-recurva, modò duplo longiora scapo, obscurè viridia,* 2-8-*uncialia, supernè vix setâ crassiora, basi membranaceo-dilatata.* Scapus *(modò plures) erectus, strictiusculus,* 1-3-*uncialis.* Flores *erecto-racemosi,* 2-10, *inodori, albi, vix adæquantes* ⅔ *partes unciæ per transversum.* Bracteæ *membranosæ, lato-ovatæ cum carinâ fuscâ, abruptè setaceo-cuspidatæ, appressæ pedicello paulò longiori.* Pedicelli *erecti, filiformes, subbreviores corollâ.* Cor. *intùs nivea, patentissima, sexpartita;* laciniæ *lanceolato-oblongæ,* 3 exteriores *sublatiores concaviores dorso carinatæ cum maculâ viridi oblongâ,* interiores *planæ dorso parciùs vel non omninò virescentes.* Fil. *alba, plana, corollâ* ⅓ *vel ultrà breviora, erecto-patentia, alterna lanceolata sublongiora,* 3 *subulata subsesquiangustiora:* anth. *flavæ, oblongæ, breves, primò erectæ, indè incumbentes.* Germ. *viride, oblongum, trisulco-3-gonum angulis rotundatis:* stylus *subbrevior germine, albus, strictus,* 3-*queter, erectus:* stig. *apex concolor triqueter, puberulus, non crassior stylo.*

"This species was found growing on the rocks in Zwart-"water Poort, and in similar situations in other parts of "the colony of the Cape of Good Hope. The cultivated "plant greatly exceeds in size the wild one, which is re-"markable for being one of the smallest of the natural "order. The bulbs produce an abundance of offsets, and "seem to prefer being partly out of ground, as in their "natural state they are always exposed to the air, and they "exist for a great part of the year without any other nou-"rishment than the moisture contained in their diminutive "bulbs."

We are obliged to Mr. Burchell for the preceding notice concerning our present subject; the drawing of which was

taken from a specimen that flowered in his collection at Fulham, in August last, and had been brought from the Cape by himself.

The species was introduced by Mr. Masson in 1774, and some of the specimens, which flowered at Kew, are preserved in the Banksian Herbarium. The plant however has been long since lost in the gardens. It comes near to ORNITHOGALUM *tenellum*; which is a much larger species, with a black-covered bulb, linear leaves shorter than the scape, pedicles much longer than the flowers, subulate filaments of one size, cream-coloured anthers, and germen pale below and yellow above.

Bulb in *niveum* oblately spherical, about the size of a Bullace-plum, smooth, greenish above. *Leaves* about 4, filiform, tapered, channelled, dark green, of a grassy and rather tough consistence (not tender and fleshy as more usual in the genus), upright, recurved, sometimes twice the length of the scape, not much thicker near the top than a bristle, membranously dilated at the base. *Scape* (sometimes several) stiffish, 1-3 inches high. *Flowers* 2-10, in a loose upright raceme, scentless, white, scarcely $\frac{2}{3}$ of an inch across. *Bractes* membranous, broadly ovate, with a brown keel, terminated by an abrupt bristleshaped point, pressed against the pedicles, which surmount them but little. *Pedicles* upright, filiform, rather shorter than the corolla. *Corolla* clear white within, flatly outspread, sixparted; segments lanceolately oblong, three outer ones rather the broadest, more concave, keeled at the back, which has a green oblong mark, inner ones flat, slightly or not at all marked with green at the back. *Filaments* white, flat, about $\frac{1}{3}$ shorter than the corolla, upright, spreading, alternate ones lanceolate, and rather the longest, the three others subulate, and nearly once and a half narrower. *Anthers* deep yellow, short. *Germen* green, oblong, roundly trigonal, 3-furrowed: *style* rather shorter than the germen, white, triangular: *stigma* a triangular point of the same colour and not thicker.

CAMPANULA lilifolia.

Lily-leaved Bell-flower.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CAMPANULACEÆ. *Jussieu gen.* 163. *Div. I.* Antheræ distinctæ.

CAMPANULACEÆ. *Brown prod.* 559. *Sect. I.* Corolla monopetala, regularis. Antheræ liberæ.

CAMPANULA. Suprà vol. 1. *fol.* 56.

Div. Foliis lævioribus.

C. *lilifolia*, foliis lanceolatis; caulinis acutè serratis, floribus paniculatis nutantibus. *Linn. sp. pl.* 1. 233.

Campanula lilifolia. *Hort. Kew.* 1. 221. *ed.* 2. 1. 347. *Willd. sp. pl.* 1. 899. *Jacq. hort. schœnb.* 3. 46. *t.* 335. *Smith prod. fl. græc.* 1. 138. *Wald. et Kitaib. hung.* 3. 274. *t.* 247. *Baumgarten en. stirp. transylv.* 1. 148.

Campanula foliis radicalibus ex cordato-ovatis, caulinis lanceolatis, sæpè serratis floribus nutantibus. *Gmel. sib.* 3. *t.* 26.

Herba *perennis?* Caules *sesqui-bipedales v. ultrà, infernè foliati, teretes, glabri, striato-angulosi, erecti, supernè paniculati.* Fol. radicalia *(sub exortû caulium abeuntia) petiolata, cordata, v. subrotunda,* petiolo *submarginato;* caulina *undique sparsa, numerosa, patentia, supernè versùs sensim majora, ovato-lanceolata, brevè petiolata v. sessilia, firmula, serrata dentibus glandulâ parvâ præfixis, versùs basin integra, immersè nervosa, glabra, reticulato-venosa, 3-uncialia v. longiora, latitudine unciali v. majore, subtùs pallentia, summa longiùs attenuata.* Panicula *terminalis infernè composita, subpyramidata, pedalis, secunda, numerosa, laxa, patula, erecta;* flores *suaveolentissimi, albo-cærulescentes, nutantes:* ramuli v. pedunculi *axillares, pauciflori, filiformes, nervoso-striati, nudi:* pedicelli *subcolorati, subbreviores flore, flexiles, recurvi,* bracteâ *oblongo-lanceolatâ glanduloso-dentatâ basi et 2 aliis supernis minutis edentatis stipati.* Cal. *germine continuus, glaber, stellatus, foliolis lanceolatis glanduloso-subserratis, glandulâ atro-purpureâ præfixis.* Cor. *cupulato-v. nunc cyathodi-campanulata, obsoletè pentagona,* ¾ *unciæ profunda, limbi laciniis latè ovatis acuminatis patulis margine reflexo.* Stam. ⅓ *breviora corollâ:* fil. *alba, lanceolato-capillaria, infrà membranoso-dilatata villis hirsutis densis marginata intùs glabra in tubum conniventia, suprà retorto-patentia nuda:* anth. *erectæ, lineares, sulphureæ.* Germ. *turbinatum, glabrum, toroso-3-lobum, costato-nervosum coronatum tubulo elevato nectarifero epigyno ochroleuco carnoso lævi cylindrico truncato subdentato pluriès breviore basibus dilatatis filamentorum quibus inclusum:* stylus ⅓ *longior corollâ, clavato-filiformis, infrà glaber albicans suprà pubescens cærulescens:* stig. 3 *lobiformia, replicata, recurva, obtusa, intùs albicantia.*

A species found on mountains in Siberia, the island of Crete, Hungary, and Transylvania. Introduced in 1784 by M. Thouin. Although a handsome, extremely sweet scented, and to all appearance hardy plant, rarely met

with in our gardens. We are not aware, however, of any difficulty in its culture. The corolla is observed to vary from a broad campanulate form to one of narrower dimensions. In flower during a great part of the summer.

Perennial? *Stems* from a foot and half to two feet high and more, leafy downwards, round, smooth, angularly streaked, upright, panicled upwards. *Radical leaves* (which are not present after the stem has appeared) petioled, cordate, or nearly round, with a marginated petiole; *cauline ones* scattered in every direction, numerous, spreading, upper ones gradually larger, ovately lanceolate, shortly petioled or sessile, rather substantial, serrated, the teeth having a small gland at the point, entire towards the base, depressedly nerved, smooth, reticulately veined, 3 inches long or more, one or more broad, pale underneath, the uppermost the longest pointed. *Panicle* terminal, pyramidal, compounded at the lower part, about a foot long, facing one way, loose, numerous, upright, slightly spreading; *flowers* whitish blue, nodding; *peduncles* or *branchlets* axillary, few-flowered, filiform, nervedly streaked, naked: *pedicles* somewhat coloured, rather shorter than the flower, flexile, recurved, beset at the base by an oblong-lanceolate glandularly toothed *bracte*, and higher up by two other very small ones, which are not toothed. *Calyx* continuous with the germen, smooth, radiate, leaflets lanceolate glandularly subserrated, and pointed by a black red gland. *Corolla* cupularly and broadly, or cyathiformly and more narrowly campanulate, obsoletely pentagonal ¾ of an inch deep; segments of the limb broadly ovate, acuminate, slightly spreading, reflectent at the margin. *Stamens* a third shorter than the corolla: *filaments* white, partly lanceolate, partly filiform, membranously dilated below, edged with a thick shaggy pubescence, smooth on the inside, converging into the form of a tube, at the upper part coiled back, spreading naked: *anthers* upright, linear, sulphur-coloured. *Germen* turbinate, smooth, torosely 3-lobed, ribbed, crowned by a small cylindric epigynous upright cream-coloured fleshy smooth tube which is several times shorter than the wide parts of the filaments that enclose it: *style* ⅓ longer than the corolla, clavately filiform, smooth and white at the lower part, blue and villous above: *stigmas* lobe-formed, spreading, recurved, obtuse, whitish inwards.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, King's Road, Fulham.

CAMPANULA sarmatica.
Marschall's Bell-flower.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CAMPANULACEÆ. *Jussieu gen.* 163. *Div. I.* Antheræ distinctæ.

CAMPANULACEÆ. *Brown prod.* 559. *Sect. I. Cor.* 1-petala, regularis. *Anth.* liberæ.

CAMPANULA. Suprà vol. 1. *fol.* 56.

Div. Capsulis ovatis: calycibus 10-*fidis: segmentis alternis reflexis.* Marsch. Bieb. taur. cauc. 1. 153.

C. *sarmatica,* capsulis obtectis, foliis tomentosis: inferioribus cordato-lanceolatis petiolatis, superioribus oblongis sessilibus, floribus cernuis, germinibus lanatis. *Id. loc. cit. n.* 382; *sub* C. betonicifoliâ.

Campanula betonicifolia. *Id. loc. cit.; (nomen jampridem in Prodromo Floræ Græcæ aliâ specie occupatum).*

Herba *perennis tota villoso-cinerascens, lactescens.* Caulis 1-2-*pedalis, striato-teres, inter flores subflexuosus.* Flores *longè sparsèque racemosi, nutantes, cærulei, distantes;* pedunculi *axillares, solitarii,* 3-*unciales ad ferè obsoletos, striato-teretes, ascendentes, strictiusculi,* 1-*flori, bracteati foliolis* 2 *imis majoribus oppositis folium axillæ decussantibus aliisque sparsis decrescentibus, supremo contiguo calyci.* Folia radicalia *petiolata, subhastato-lanceolata, grossè crenato-dentata, subcrispa, subrugosa, nervosa:* caulina superiora *semiamplexicaulia, sparsa, oblongo-lanceolata, crispula, nervosa, reticulato-venosa, serrato-dentata dentibus glandulâ exiguâ præfixis.* Cal. *campanulatus, patens, ter brevior corollâ, foliolis* 5 *angustiùs sagittatis villosis, erectis, nervo medio carinatis, angulo cujusque sinûs secundùm germen in breve et deflexum cornu v. calcareolum rubidè et sub-penicillatìm apiculatum producto.* Cor. *oblongo-campanulata, sesquiunciâ paulò brevior, nervosa, extùs pubescens;* limbus *patens recurvus,* $\frac{1}{3}$ *v. circà brevior tubo; laciniis oblongo-ovatis, acutis,* 3-*nerviis.* Stam. *æqualia calyci;* fil. *rigida, infrà obovato-dilatata, fornicata margine villoso, in umbonem depressam conniventia, suprà brevè setacea:* anth. *ochroleucæ, demùm in gyros retorquendæ.* Germ. *oblatum brevè turbinatum, albo-lanatum,* 3-*gonum,* 3-*loc. ovulis numerosis compressis:* stylus *æqualis tubo corollæ, crassiusculus, teres, albus, apice cærulescens, erectus:* stig. 3 *patula subulata, intùs luteo-virentia.*

A common species in the rocky subalpine regions of Caucasus, where it was observed by M. Marschall, author of the excellent Flora Taurico-caucasica, or account of the plants of Caucasian Tartary. We have changed the original specific name, it having been already applied to another species in the Prodromus of the Flora Græca, a publication which preceded by two years that of M. Marschall.

The drawing was made from a very recently imported plant which flowered in the open ground at Messrs. Whitley and Co.'s, of the Fulham nursery, in July last. It is said to be perfectly hardy.

An herbaceous milky hoarily villous perennial plant. *Stem* 1-2 feet high, oftener simple than branched, round, streaked, slightly flexuose between the flowers. *Radical leaves* petioled, subhastately lanceolate, coarsely sub-crenately toothed, slightly curled at the edge, slightly wrinkled, nerved; *upper cauline ones* scattered, half-stemclasping, oblong, lanceolate, serrately toothed with teeth headed by a small gland, somewhat curled at the edge, nerved, reticulately veined. *Flowers* blue, nodding, disposed in a long scattered wideset raceme; *peduncles* axillary, solitary, one-flowered, from 3 inches long to nearly none, round, streaked, rather stiff, ascendent, leafletted, two leaflets at the base largest and decussating the one at the axil, the rest smaller scattered distant, one close to the calyx. *Calyx* campanulate, spreading, 3 times shorter than the corolla; *leaflets* narrow, sagittate, villous, upright, with a middle keel-like nerve, the corner of each of the sinuses juts downwards along the sides of the germen like a short spur, and is headed by a small red thinly pencilled gland. *Corolla* oblong-campanulate, little less than an inch and half deep, externally pubescent and nerved, *limb* spreading, recurved, about $\frac{1}{3}$ shorter than the tubular portion, *segments* oblong, ovate, sharp, 3-nerved. *Stamens* the length of the calyx; *filaments* rigid, vaulted below, obovately dilated, villous at the margins, converging into a depressed oblate boss, each surmounted by a short setaceous antheriferous pedicle: *anthers* cream-coloured, ultimately coiling backwards. *Germen* woolly, white, oblate, shortly turbinate, 3-cornered, 3-celled; *ovules* numerous flat: *style* equal to the tubular portion of the corolla, upright, thickish, round, white and blue: *stigmas* slightly spreading, subulate, greenish yellow inwards.

Mr. Marschall queries if this is not of the same species as Campanula *violæfolia* of Lamarck; we have compared the description of that with our plant, and believe the two to be distinct.

CLEMATIS aristata. *Fœmina.*

Fertile-flowered awned-anthered Virgin's-Bower.

POLYANDRIA *POLYGYNIA.*

Nat. ord. RANUNCULACEÆ. *Jussieu gen.* 231. *Div. I.* Capsulæ monospermæ, non dehiscentes.

CLEMATIS. Suprà vol. 2. *fol.* 97.

Div. Scandentes.

C. *aristata*, dioica; foliis ternatis, foliolis oblongo-cordatis v. ovatis, acuminatis, mucronato-serratis, pedunculis sub5floris, corolla 4-petala, campanulata, erecta, antheris aristatis.

MAS. antheris polliniferis.

FŒM. antheris inanibus.

Frutex *sarmentosus, ramosus, scandens ope foliorum cirrhoso-prehensilium.* Folia *longè petiolata, subtùs pilosiuscula et varicoso-nervosa, foliolis firmis, crassiusculis, denticulis remotiusculis mucroniformibus, cæterum integerrimis, terminali majore sesqui-biunciali, latitudine unciali:* petioli *duriusculi, sæpiùs volubiles, pilosiusculi, suprà canaliculati, partiales breviores foliolis.* Flores *albicantes, axillares et terminales, subquinato-corymbosi, erecti, unâ cum pedunculis breviores foliis;* pedunculi communes *oppositi, robusti, brevissimi, 3-5-divisi v. modò pluriès, bracteis 2 oppositis linearibus patentissimis pilosis;* partiales *longi filiformes hirsutiùs villosi longiores corollâ, bracteolis 2 oppositis patentibus hirsutis infra medium stipati.* Cor. *4-petala, modò subinæqualis, supernè recurvo-patens, extùs ochroleuca villosa:* pet. *lineari-oblonga, acumine obtuso, ad maximum ¼ unciæ longa, lineas 2 v. circà lata.* Fil. *(in fœm. saltèm) ordine simplici pistillorum fasciculo cui æqualia circumposita, ochroleuca;* anth. *adnatæ, effetæ.* Pist. ¼ *breviora corollâ, conferta, lanâ implexâ invicèm continentia:* germ. *parvulum:* stylus *setaceus, longus, lanatus:* stig. *continuum, angustum, subulatum, luteolum.*

An unrecorded New Holland plant. Introduced most probably since the publication of the late edition of the Hortus Kewensis. The species is diœcious, having fertile pistils with sterile stamens on one plant, and sterile pistils with fertile stamens on another. The name has been adopted from the Banksian Herbarium, and was suggested to Mr. Brown by the small intermediate point which extends itself beyond the loculaments or body of the anthers.

A high-climbing evergreen shrub, mounting by means of prehensile leaves, that serve for claspers or tendrils. *Leaves* long-petioled, thinly beset with hairs beneath, and varicosely veined; *leaflets* oblongly cordate or ovate, pointed firm, somewhat fleshy, with small pointed and rather

wideset teeth at the edge, otherwise entire, the terminal one the largest, and from about an inch and half to about two inches long, about one broad: *petioles* wiry, often twining, thinly furred, channelled above, partial ones shorter than the leaflets. *Flowers* white, axillary and terminal, in corymbs of about five, upright, together with their peduncles shorter than the leaves; *common peduncles* opposite, thick, very short, 3 or 5 times divided, and sometimes oftener, with two opposite wide-spreading linear furred bractes; *partial ones* long, filiform, somewhat roughly furred, longer than the corolla, furnished below their middle with two small opposite patent hirsute bractes. *Corolla* 4-petalled, campanulate, upright, sometimes slightly unequal, upwards recurvedly spreading, on the outside cream-coloured and villous: *petals* linearly oblong, bluntly pointed, at most about three fourths of an inch long, about 2 lines broad. *Filaments* (in the fertile plant at least) surrounding the fascicle of the pistils in a single rank, cream-coloured: *anthers* adnate, pollenless or sterile. *Pistils* about one third shorter than the corolla, close, interlocked by entangled wool: *germens* small: *styles* bristleshaped, long, woolly: *stigmas* continuous, slender, subulate, yellowish.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham, where it was cultivated in the greenhouse.

by Ridgway

IPOMŒA obscura.

Hairy-stemmed East Indian Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.* Stylus unicus. CONVOLVULACEÆ. *Brown prod.* 481. *Sect. I.* Germen unicum.

IPOMŒA. *Suprà vol.* 1. *fol.* 9.

Div. Caule volubili.

I. *obscura*, foliis cordatis indivisis, caule subpubescente, pedunculis incrassatis unifloris, calycibus glabris. *Linn. sp. pl.* 1. 220; (*sub* CONVOLVULO obscuro).

Convolvulus obscurus. *Lin. l. c. Vahl symb.* 3. 27. *Hort. Kew.* 1. 209. *ed.* 2. 1. 330. *Willd. sp. pl.* 1. 852.

Convolvulus flore minore lacteo, fundo atrorubente. *Dill. elth.* 98. *t.* 83. *f.* 95.

Herba *annua volubilis.* Caulis *teres, rubescens, villosus.* Folia *lato-cordata, integra, subtùs et margine subpubescentia, uncialia v. ferè 3-plo longiora:* petioli *teretes, villosi, longiores laminâ.* Pedunculi *axillares, longiores petiolis, sæpiùs uniflori, modò 3-flori, villosi,* bracteolis 2 *obsoletis ad articulum stipatis, indè clavato-incrassati, nudiusculi.* Cal. *pluriès brevior corollâ, 5-partitus, crassus, rigidus, cylindraceo-campanulatus, tritus gravem fundens odorem, foliolis ovato-oblongis, obtusis.* Corolla *hypocrateriformis, tota glabra, lactea, plicis 5 ochroleucis, fauce purpureâ;* tubus *purpureus, æqualis calyci, ampliatus in faucem cylindricam triplo latiorem et longiorem cum fundo purpureo;* limbus *explanatus, subpentagonus, quinquiès emarginatus.* Stam. *inclusa fauce cujus basi inserta, albicantia;* fil. *subulata, infernè glanduloso-pilosa,* 2 *breviora:* anth. *ovatæ, erectæ, ochroleucæ.* Stylus *æqualis fauci, albidus:* stig. *granuloso-capitatum, pallidum:* sem. *grandiuscula, fusca, villosa, pauca.*

A tender annual, native of the East Indies; cultivated in Sherard's celebrated garden at Eltham, in 1732. It is one which very commonly makes its appearance in the parcels of seeds that are occasionally received from India, and is probably general in the country.

Stem twining, round, reddish, furred. *Leaves* broadly cordate, entire, slightly pubescent underneath and at the edge, from an inch to near three inches long; *petioles* round, villous, longer than the blade. *Peduncles* axillary, longer than the petioles, more generally one-flowered, sometimes three-flowered, villous, furnished with two nearly obsolete bractelets at the joint, from whence they are clavately

thickened and nearly smooth. *Calyx* several times shorter than the corolla, five-parted, thick, rigid, cylindrically campanulate, when bruised emitting a strong scent resembling that of some of the firs, leaflets ovately oblong obtuse. *Corolla* hypocrateriform, entirely smooth, white, with five cream-coloured plaits, and a purple eye; *tube* purple, equal to the calyx, enlarged into a three times longer and wider faux, which is purple at the bottom; *limb* flatly extended, slightly pentagonal, five-notched. *Stamens* enclosed within the faux, at the base of which they are inserted, white; *filaments* subulate, glandularly furred below, two shorter than the rest; *anthers* ovate, upright, cream-coloured. *Style* even with the faux whitish: *stigma* capitate, granular, pale. *Seeds* largish, brown, villous, few.

The drawing was made at the nursery of Messrs. Whitley, Brames, and Milne, Fulham, to whom the seed has been lately sent from the botanic garden at Calcutta, by Sir Evan Nepean.

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White sc. 14 Brownlow St. Holborn.

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GNAPHALIUM apiculatum.

New Holland Everlasting.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Corymbiferæ. *Jussieu gen.* 177. *Div. I.* Receptaculum nudum. Semen papposum. Flores flosculosi.

GNAPHALIUM. *Recept.* nudum. *Pappus* pilosus s. plumosus. *Cal.* imbricatus, squamis marginalibus rotundatis, scariosis, coloratis. *Willd. sp. pl.* 3. 1849.

Suffrutices aut herbæ; folia alterna sæpè canescentia; flores sæpè terminales, glomerati, aut corymbosi; calyx persistens. Species una dioica insigni exceptione. Juss. l. c. 179.

Div. Herbacea Chrysocoma.

G. *apiculatum*, herbaceum, foliis subspathulatis tomentosis apice nudis membranaceis subulatisve, floribus paniculatis, squamis calycinis ciliatis. *Labillard. nov. holl.* 2. 43. *t.* 188.

Gnaphalium apiculatum. *Persoon syn.* 2. 418. *Hort. Kew. ed.* 2. 5. 15.

Herba *tota gossypino-lanata, cana;* caulis *erectus simplex v. paniculato-ramosus, sesqui-bipedalis v. ultrà.* Fol. *sparsa, distantia, erecta, semiamplexicaulia, spathulato-oblonga, aliquotiès longiora quàm lata, sensìm in bracteas decrescentia, longiora ferè 4-uncialia, abruptè et latè acuminata, apiculo subulato fulvescente glabro præfixa, nervo medio simplici.* Flores *aurei, plures, erecti, subcorymboso-fastigiantes, breviores pedunculis.* Cal. *hemisphæricus:* squamæ *flavæ, lanceolato-lineares, ordine plurimo imbricati, ungue tereti viridi villoso petioliformi, laminâ scariosâ lineari-lanceolatâ, sæpè maculis sanguineis vagè notatâ, latere utroque suprà unguem pro brevi spatio lanâ longâ implexâ munitâ indèque invicèm cum proximis continente, ultra lanam sericeo-ciliatâ, supernè nudâ, nervo medio dorsali:* squamarum intimarum *ungues membranoso-marginati et laminis eroso-dentatis longiores.* Discus *planiusculus, amplus, aureus, subbrevior calyci:* flosculi *numerosissimi, infundibuliformes, aurei, glabri:* tubus *filiformis, viridiusculus, 3-plo longior limbo:* limbus *aureo-micans campanulatus laciniis acutis recurvo-patentibus.* Germ. 2-*v.* 3-*plo-brevius flosculo, gracile:* pappus *ex radiis pluribus* (7-8?) *plumosis, æqualibus disco.* Recept. *nudum, punctatum.*

A greenhouse perennial, native of Van Diemen's Island; introduced in 1804 by Colonel William Paterson. Now become very general in our collections, and deserves to be so, as it is of easy culture, brilliantly coloured, and in bloom for several months together.

Gnaphalium is distinguishable from Elichrysum and Xeranthemum, by having a rayless calyx.

Stem and foliage covered over by a white cottony fleece, through which the green shines but faintly. *Stem* upright,

simple or branched like a panicle, from about a foot and half to about 2 feet high. *Leaves* scattered, wide apart, upright, halfstemclasping, spatulately oblong, several times narrower than long, gradually diminishing into bractes, the longest about 4 inches, with an abrupt broadish point and a brownish yellow subulate smooth tip; middle nerve unbranched. *Flowers* several, of a bright golden-yellow, upright, nearly corymbose, shorter than the peduncles. *Calyx* hemispherical; *leaflets* deep yellow, and often marked with some loosely scattered crimson spots, imbricant in several rows, lanceolately linear, unguiculate, the unguis round, green, villous, and resembling a petiole, lamina or blade scariose linearly lanceolate, furnished above the unguis for a little way on each side with long entangled wool, by means of which they hold together reciprocally with those the nearest to them; from where the wool ends they have a silky fringe, and beyond that are smooth: the ungues of the *inmost* have a membranous edging, and are longer than their short erosely indented blades. *Disk* flat, broad, yellow, rather lower than the calyx: *florets* very numerous, funnelform, yellow, smooth: *tube* filiform, greenish, 3 times longer than the limb: *limb* of a glittering golden-colour, campanulate, segments spreading, recurved, pointed. *Germen* twice or thrice shorter than the florets, slender: *pappus* or *aigrette* of several feathery rays (7-8?), which are equal to the disk. *Receptacle* naked, punctured.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham.

CAMPANULA lactiflora.
Grey panicled Bell-flower.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Campanulaceæ. *Jussieu gen.* 163. *Div. I.*
Campanulaceæ. *Brown prod.* 559. *Sect. I.* Corolla monopetala regularis, Antheræ liberæ.

Div. Capsulis ovatis, calycibus quinquefidis.

C. *lactiflora*, foliis lanceolatis biserratis cauleque ramoso hispidis, floribus paniculatis, calycibus hispidis; segmentis dilatatis serratis. *Marsch. Bieb. taur. cauc.* 1. 153.

Campanula lactiflora. *Poiret suppl. encyc. de Lamarck* 2. 63.

Caulis *2-4-pedalis, teres, viridis, anguloso-striatus, subflexuosus, hispidiùs pubescens, nervis decurvo-setulosis.* Folia *sessilia oblonga, lata, lanceolata, acuminata, decrescentia usque ad minima, nervosa, inequalitèr serrata dentibus glanduloso-apiculatis, sparsa, distantia, subtùs varicoso-nervosa, margine nervisque setoso-pilosa.* Flores *folioso-paniculati;* pedunculi *axillares et terminales, solitarii, numerosi, trichotomo-cymosi, anguloso-striati, hispidi, erecto-patentes, decrescentes, subseptemflori;* pedicelli *nisi trichotomiæ medius* bracteis *diminuto-foliaceis.* Cal. *virens, patens, æqualis tubo vel parti non fissæ corollæ;* foliola *latiùs ovato-lanceolata, cuspidata, herbacea, tenuia, nervosa, germinis continua, ad nervos setaceo-pilosa, serrata, dentibus glandulâ rubidâ præfixis.* Cor. *lato-campanulata, cærulæo-albicans, vix unciam profunda, patens, intùs infernè villosa;* tubus *duplo brevior limbo;* limbi laciniæ *nervosæ, ellipticæ, acutulæ, acumine brevi.* Germ. *virens, brevè turbinatum angulis trinerviis, triloc. loculamentis polyspermis;* discus epigynus *planiusculus torulosus.* Stylus *brevis, crassus, teres, glaber:* stig. 3, *pallentia, longiora stylo, incrassato-laminosa, ovali-oblonga, infrà turbinato-conniventia, suprà revoluto-reflexa.* Fil. *brevia, erecta, distantia, è base brevissimâ dilatatâ subulata, medio replicanda:* anth. *luteæ, erectæ, primò conniventes, demisso polline divaricatissimè divergentes.*

A species recently introduced by Mr. Knight, nurseryman in the King's Road, Chelsea. Found on Mount Caucasus by Mr. Marschal, and recorded in his account of the plants of Caucasian Tartary. From what appears in the specific phrase, it is not impossible it may also be the Campanula *betonicifolia* of the prodromus of the Flora Græca, of which the description and figure are yet to appear. We do not recollect any species in the genus, that has the leaflets of the calyx so broad in proportion to the rest of the flower. Tolerably hardy, but requires a rich soil to make it grow in perfection, when it produces an abundance of bloom, and for a long time in succession.

Stem 2-4 feet high or more, round, green, angularly striated, slightly flexuose, roughishly pubescent, with small decurved bristles along the nerves. *Leaves* sessile, scattered, wideset, broad, oblong, lanceolate, long-pointed, gradually decreasing to very small ones, nerved, unevenly serrate, with glandularly headed teeth, varicosely nerved beneath, setaceously pubescent at the margin and along the nerves. *Flowers* in a leafy panicle; *peduncles* axillary and terminal, solitary, numerous, trichotomously cymose, angularly striate, hispid, uprightly spread, decrescent, generally 7-flowered; *pedicles*, except the middle one of each trichotomy, with small leafy bractes. *Calyx* green, patent, equal to the tube of the corolla; *leaflets* ovately lanceolate, pointed, herbaceous, thin, nerved, continuous with the germen, setaceously pubescent at the nerves, serrate, a small red gland heading every tooth. *Corolla* broadly campanulate, blueish white, or grey, rather less than an inch in depth, patent, villous on the inside below; *tube* twice as short as the limb; *segments of the limb* elliptic, nerved, somewhat pointed, point short. *Germen* green, short, turbinate, angles 3-nerved, trilocular, loculaments with many ovules: *epigynous disk* or *basement* almost level, marked with a circle of obsoletely prominent nodules. *Style* short thick, columnar, smooth; *stigmas* 3, pale-coloured, longer than the style, thickly laminar, ovally oblong, turbinately conflectent below, revolutely reflectent above. *Filaments* short, upright, wideset, subulately tapered from a very shallowly dilated base, reflectent at the middle: *anthers* yellow, upright, at first converging, ultimately diverging to behind the back of the filaments.

HYDROPHYLLUM canadense.
Canadian Water-leaf.

PENTANDRIA *MONOGYNIA.*

Nat. ord. BORAGINEÆ. *Jussieu gen.* 128. *Div. II.* Fructus uni aut bicapsularis.

HYDROPHYLLEÆ. *Brown. MSS.*

OBS. *Distincti (à* Boragineis *nempè) ordinis initia constituunt genera capsularia* HYDROPHYLLUM, PHACELIA *et* ELLISIA, *ob albumen copiosum cartilagineum, et folia composita v. altè lobata.* Brown prod. 492.

HYDROPHYLLUM. Cal. 5-partitus. *Cor.* campanulata 5-fida, intùs sulcata striis 5 melliferis marginatis, staminum filamenta amplexantibus. *Stam.* exserta, *antheris* oblongis incumbentibus. *Stig.* bifidum. *Caps.* globosa 1-loc. 1-sperma, *seminibus* 3 abortivis. *Herbæ; fol. palmata aut semipinnata; flores corymbosi corymbis pedunculatis terminalibus aut suboppositifoliis.* Juss. l. c. 129.

H. *canadense,* hirsutum; foliis lobato-angulosis, fasciculis florum confertis. *Pursh amer. sept.* 1. 134.

Hydrophyllum canadense. *Linn. sp. pl.* 1. 208. *Willd. sp. pl.* 1. 815. *Hort. Kew.* 1. 197. *ed.* 2. 1. 313. *Lamarck illustr.* 1. 426. *t.* 97. *fig.* 2. *Michaux bor. amer.* 1. 133.

Herba *perennis.* Caulis *subspithamæus, teres, subangulosus, hirsutus rubro-fuscescens, distantèr foliosus.* Folia *alterna, longè petiolata, subreniformi-rotunda, septemloba transversè latiora, lobis acutis acutè dentatis vix ad ultrà tertiam partem laminæ divisis, suprà hirsuta subtùs glabra, sinû lato ad basin.* Flores *cymoso-paniculati, cymis axillaribus et terminalibus multifloris longioribus foliis.* Cal. *herbaceus, 5-partitus, turbinato-campanulatus, duplo v. ultrà brevior corollâ, foliolis subulatis.* Cor. *albicans, oblongo-campanulata, non* $\frac{1}{3}$ *partem unciæ profunda, 5-fida:* tubus *ferè duplo longior limbo, 5-gonus nervis 5 cum angulis alternis, intùs sulcis 5 melliferis lamellâ prominulâ utrinque marginatis descendentibus de juxtà infra medium cujusque limbi laciniæ ad imum tubi;* limbus *erecto-patens, æqualis, laciniis ovato-rotundatis.* Fil. *imo tubo inserta, alba, setiformia, erecta, duplo ferè longiora corollâ, medio pilosa:* anth. *fuscæ, sagittato-oblongæ, breves, obtusæ, incumbentes.* Germ. *superum, conicum, parvum, virens, obtusum, apice hirsutum, infernè supra basin annulo crasso glanduloso obsoletè toruloso cinctum:* stylus *glaber, albus, setaceus, æqualis staminibus:* stig. *breve, bifidum, obtusum.*

HYDROPHYLLUM, PHACELIA, and ELLISIA, ranked by Jussieu in the *Boragineæ,* are proposed by Mr. Brown as the foundation of a separate order, by the name above quoted. They are distinguishable from their former co-ordinates, by a capsular fruit, a copious cartilaginous albumen, and a compound or else deeply lobed foliage.

The present species grows on wet rocks and shady

mountains from Canada to Pensylvania; and was cultivated at the Chelsea Garden in 1759 by Miller. No figure of it has been ever published from the living plant.

Root perennial. *Stem* about 8 or 9 inches high, round, slightly angular, rough, reddish brown, distantly leaved. *Leaves* alternate, long petioled, subreniformly round, broader than long, 7-lobed, rough above, smooth and shining below, a broad sinus at the base, lobes sharp-pointed and sharply toothed, scarcely divided beyond one third of the blade; not very unlike those of the Maple tree. *Panicle* of terminal and axillary many-flowered cymes longer than the leaves. *Calyx* herbaceous, 5-parted, turbinately campanulate, twice as short as the corolla or more, leaflets subulate. *Cor.* whitish, oblong-campanulate, not $\frac{1}{3}$ of an inch deep, five-cleft: tube nearly twice as short as the limb, pentagonal with five nerves alternating with the angles, and five melliferous grooves within having a prominent laminar edge along each side taking their rise from just below the middle of every lamina of the limb, and continuing down to the bottom of the corolla; *limb* uprightly spread, equal, segments ovately rounded. *Filaments* white, inserted at the base of the tube, bristleshaped, upright, nearly twice the length of the corolla, pubescent at the middle: *anthers* brown, sagittately oblong, short, obtuse, incumbent. *Germen* superior, conical, small, green, obtuse, rough at the apex, just above the base engirdled by a thick glandular faintly nodular ring: *style* smooth, white bristle-shaped, equal to the stamens: *stigma* short, bifid, obtuse.

The drawing was made from a plant received from Mr. Hodson, South Lambeth.

Syd. Edwards del.

White sc. 14. Brownlow St. Holborn.

Pub. by Ridgway & Sons Dec. 1. 1817.

GNAPHALIUM congestum.

Lamarck's Everlasting.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Corymbiferæ. *Jussieu gen.* 177. *Div. I.* Receptaculum nudum. Semen papposum. Flores flosculosi.

GNAPHALIUM. *Suprà fol.* 240.

Div. Fruticosa Argyrocoma.

G. *congestum,* fruticosum, foliis lineari-lanceolatis, supernè rugoso-scabris, subtùs tomentosis, corymbo glomerato simplici. *Lamarck encyc.* 2. 732.

Gnaphalium congestum. *Willd. sp. pl.* 3. 1852.

Gnaphalium tricostatum. *Thunb. prod.* 157.

Frutex *nunc 3-pedalis, nudiusculus, ramosus:* rami *teretes, lanâ araneosâ albicantes.* Fol. *sparsa, semiamplexicaulia, patentissima, remotiuscula at plurimùm longiora intervallis, uncialia v. ultrà, lineari-lanceolata, angusta, cuspidata, suprà obscurè viridia, rugosa, immersè 3-nervia, convexa margine deflexo, subtùs lanâ densâ araneosâ candicantia.* Flores *terminales, numerosi, vix piso majores, paniculato-cymosi,* pedunculo communi *longo albo-lanato subaphyllo v. distantissimè folioso.* Cal. *albo-purpureus, scariosus;* foliolis *ungue viridi extùs lanato, laminâ utrinque glabrâ nitente;* exterioribus *ovato-oblongis, obtusis,* interioribus *angustioribus, ungue longo, laminâ parvâ omninò albâ, dorso lanatâ: aliis paucis in disco vagè irrepentibus et flosculis ad instar palearum se commiscentibus, modòque omninò lanceolatis.* Flosculi discoidei *cylindracei, flavi, subquinquedentati.* Germ. *glabrum, 3-plo brevius flosculo, periphæriæ flexum, centri rectum:* pappus *plumosus, multiradiatus, albus, æquans vel subsuperans flosculos:* stig. *non exserta.* Pollen *aureo-micans, grumosum, orificium flosculi cumulans.* Recept. *membranoso-denticulatum.*

Though we do not find this plant in either edition of the Hortus Kewensis, it is proved by a specimen in the Banksian Herbarium to have flowered at Kew in 1793; and had been most probably introduced by Mr. Masson, from the Cape of Good Hope, where it is indigenous. The specific name has been suggested either by a dried sample, where the inflorescence has been compressed in preserving it, or from one that had been gathered in an early stage, for, in a later, the flowers are by no means disposed in a manner to answer to the epithet *congestus* (crowded).

A branching and rather naked shrub, in the plants we have seen not exceeding three feet: *branches* round, araneously woolled, white. *Leaves* scattered in every direction, halfstemclasping, outspread, rather wideset but longer than

the intervals, linearly lanceolate, narrow, cuspidate, an inch or more in length, dark green above, wrinkled, depressedly 3-nerved and convex with a deflectent margin; underneath araneously woolled and white. *Flowers* many, terminal, cymosely panicled, scarcely bigger than a pea; *common peduncle* long and nearly leafless or with very wide-set scattered leaves. *Calyx* white and purple, scariose, *leaflets* with a green externally woolled unguis, and a shining blade or lamina, which is smooth on both sides; *outer ones* ovately oblong, obtuse; *inner* narrower, with an elongated unguis and a shorter lamina, woolly at the back and entirely white: straggling ones sometimes intrude among the florets, like *paleæ* or chaffy bractes, and are now and then completely lanceolate. *Florets* yellow, cylindrical, shallowly five-toothed. *Germen* rough, 3 times shorter than the florets, straight in the centre of the flower, curved in its periphery: *plume* or *pappus* feathery, of many rays, white, equal to or rather longer than the florets: *stigmas* unprotruded. *Pollen* grumous, of a glittering gold-colour, accumulated at the orifice of the floret. *Receptacle* membranously denticulated.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, at Fulham, where the plant was kept in the greenhouse, and is found to be of easy culture, requiring however to be planted in peat-mould and guarded from too much moisture, but above all from the effects of fog. The finest plants we have seen are in the Comtesse de Vande's botanical garden at Bayswater.

,d Edwards del.

White sc 14 Brownlow St Holb.

DURANTA Plumieri.

Smooth Duranta.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. Vitices. *Jussieu gen.* 106. *Div. II.* Flores spicati, in spicis alterni.

Verbenaceæ. *Jussieu in annal. du mus.* 7. 63. *Brown prod.* 510.

DURANTA. Cal. truncatus, sub5-fidus. *Cor.* tubo subcurvo, limbo 5-fido subæquali. *Stam.* non exserta. *Stig.* 1. *Bacca* 4 nucibus 2-locularibus 2-spermis, calyce suprà coarctato et persistente omninò tecta, certò non infera. *Frutices ramis 4-gonis; flores laxè spicati axillares aut terminales. Quibusdam spinæ axillares.* Juss. l. c. 109.

D. *Plumieri*, calycibus fructescentibus contortis. *Linn. sp. pl.* 2. 380.

Duranta Plumieri. *Jacq. amer.* 186. *t.* 176. *f.* 76. *Jacq. coll. suppl.* 119. *ic. rar.* 3. *t.* 502. *Willd. sp. pl.* 3. 380. *Hort. Kew.* 2. 363. *ed.* 2. 4. 59.

Arbuscula *orgyalis ad biorgyalem, ramosa; rami longi, flexiles, rotundatè* 4-*goni, villosi, cinerei.* Fol. *opposita, subrhombeo-elliptica, acuta, integra v. subintegra, modò suprà medium obtusè et inæqualitèr serrata, distantia, sesqui-biuncialia, obsoletè subvillosa præsertìm à parte pronâ, petiolum versùs attenuata:* petiolus *brevis, villosus.* Flores *paniculato-racemosi; racemuli opposito-axillares terminalesque, pluri-multiflori, reclinati;* pedicelli *filiformes, strictiusculi, per paria approximati, breviores flore, bracteâ villosâ subulatâ: par imum racemuli terminalis sæpè in foliis binis axillare.* Cal. *inferus, tubulosus, persistens, lanuginosus,* 5-*angulosus,* 5-*dentatus, dentibus acutis, brevibus, erectis, æqualibus,* ⅓ *parte brevior tubo corollæ, facie interangulari dorsali cæteris planiore sublatioreque.* Cor. *lilacino-v. subcæruleo-pallescens, bilabiato-hypocrateriformis, extùs lanuginosus:* tubus *de calyce curvatus, diametro angusto, dorso subplanior, intùs pilis capitatis viscosus orificio transversè sublatiore:* limbus *semunciam transversus, obliquus, ultra medium* 5-*fidus,* laciniæ *isometræ, obtusissimæ, leviùs eroso-crenulatæ,* labii summi tres *concolores patentissimæ, harum* 2 *laterales divaricatæ elliptico-obovatæ, media sublatior subtruncata;* labii imi duæ *erecto-patentes convergentes ferè duplo angustiores obovato-oblongæ, utræque lineâ saturatè violaceâ longitudinalitèr per medium ductâ.* Stam. *inclusa tubo:* fil. *sub base curvaturæ tubi inserta, brevia,* 2 *longiora, in loco quinti rudimentum glanduloso-capitatum:* anth. *conniventes, ochroleucæ, complanato-didymæ.* Germ. *glabrum, subrotundum, calyce omninò liberum:* stylus *virens, subbrevior calyce, supernè flexus, per lentem visus striatus:* stig. *viride, obliquè capitatum, verruculosum.*

The present is clearly the same species as the Duranta *Plumieri* of Jacquin, and consequently that of the Hortus Kewensis, where his figure is quoted. We should think it also Plumier's plant, but this fact being less evident, we have omitted the synonym. The plant with very green branches and long lanceolate deeply, closely, and sharply

serrated leaves, generally taken in the gardens for *Plumieri*, is, in our opinion, quite distinct from Jacquin's and Plumier's species; but may be the *inermis* of Miller, included by Willdenow in the synonymy of *Plumieri*.

A shrub or small tree, from 6 to 15 feet high: branches long, flexile, obtusely quadrangular, ash-coloured, villous. *Leaves* opposite, subrhomboidly elliptic, acute, entire or nearly so, or obtusely and unequally serrated above the middle, (in the most entire indeed the edge is uneven and shows some vestige of indentation), wideset, from about an inch and half to two inches or more in length, obsoletely villous especially underneath, tapered towards the petiole: *petiole* short, villous. *Flowers* in panicled racemes; racemelets oppositely axillary and terminal, from several- to many-flowered, reclining; *pedicles* filiform, stiffish, scattered, but generally somewhat paired, shorter than the flower, with a villous subulate *bracte:* the lower two of the terminal racemelets have generally two leaves for bractes at their base. *Calyx* inferior, tubular, persistent, downy, pentagonal, evenly 5-toothed, short, pointed, upright, about one third shorter than the tube of the corolla, the space between the two angles at the back broader and flatter than that between the others. *Corolla* of a pale blueish lilac-colour, bilabiately hypocrateriform, downy on the outside: *tube* bent from the top of the calyx, narrow, flatter at the back, covered on the inside with viscidly headed hairs, orifice transversely broader: *limb* half an inch over, slanted, five-cleft to below the middle, *segments* of one length, rounded at the end, and slightly eroded, *the three of the upper lip* of one colour, outspread, two side ones divaricate, elliptically obovate, middlemost rather broader and somewhat truncate; *the two of the lower lip* upright and spreading, contiguous, nearly twice narrower, obovately oblong, marked along the middle by a deep violet-coloured line. *Stamens* inclosed in the tube; *filaments* inserted at about the base of the curve of the tube, short, two longer, in the place of a fifth a glandularly capitate rudiment: *anthers* connivent, cream-coloured, flatly didymous. *Germen* smooth, roundish, entirely free from the calyx: *style* green, rather shorter than the calyx, bent, when seen through a magnifying glass, striated: *stigma* green, slantingly headed warty.

The drawing was made at Messrs. Whitley's and Co.'s,

a
b
c

BOUVARDIA versicolor.
Trumpet-flowered Bouvardia.

TETRANDRIA *MONOGYNIA.*

Nat. ord. Rubiaceæ. *Jussieu gen.* 196.
BOUVARDIA. *Suprà vol.* 2. *fol.* 107.

B. *versicolor,* foliis oppositis, corolla clavato-tubulosa: tubo intùs glabro.
Fruticulus *duriùs lignosus erectus ramosus cortice pallido:* rami *oppositi v. solitariò laterales, erecto-patentes, teretes, lanuginosi, interdùm rubentes.* Fol. *opposita, distantia, patentissima, firma, duriuscula, oblongo-v. ovato-lanceolata, 3-plo longiora quàm lata v. magìs, lanuginosa, ciliolato-serrata, longè attenuata petiolum versùs brevè attenuata, suprà scabriuscula, majora subbiuncialia;* petioli *stipulaceo-connati, sæpè rubentes, multotiès breviores laminis:* stipulæ *geminæ, subulatæ, appressæ.* Pedunculi *ramorum terminales, solitarii, vix duplo longiores petiolis, 3-v. pluri-flori atque semel trichotomi, bibracteati,* bracteis *subulatis v. nunc diminuto-foliaceis;* pedicellis *brevioribus calyce.* Flores *nutantes, flavo-coccinei parùm excedentes unciam, inodori.* Cal. *brevis, 4-partitus, villosiusculus, patens, germinis continuus;* foliolis *lanceolato-subulatis, sinubus latis distinctis.* Cor. *tubata, nuda, obtusè 4-gona, vel sæpè demtâ unicâ quartâ parte numeri 3-gona:* tubus *longissimus, infernè versùs attenuatus, intùs omninò glaber;* limbus *multotiès brevior, 4-partitus, patentissimus; laciniis ovato-attenuatis, æqualibus, firmis, duriusculis, recurvis.* Stam. *alterna laciniis, tubo (cui* filamenta *omninò adnata) æqualia:* anth. *ore tubi sessiles, fuscæ, lineari-oblongæ, erectæ, introversæ, à medio dorso affixæ.* Germ. *breve, oblatum, lanuginosum, biloculare, dispermum;* stylus *capillaris, brevior tubo:* stig. 2, *alba, lineari-lobiformia, erecta, subconniventia.*

We do not trace our plant in any published species, and have ranked it in Bouvardia with some hesitation. The technical character of that genus expresses a calyx with a tooth between each of the 4 segments, and a polyspermous bilocular germen; in this there were no intervening calycine teeth, and though the germen seemed bilocular it did not appear to be polyspermous; but our view of it was transient, and we may have mistaken the receptacle of the ovula for a single ovulum, and missed the true ones; for we thought the loculaments monospermous. The leaves are here by pairs, instead of by threes as in *triphylla.*

The drawing was made from a plant at Messrs. Whitley, Brames, and Milne's nursery at Fulham, where we were informed that it had been received from a collection at Ghent, under the name of Houstonia *alba,* without any

clue to its indigenous origin. It is treated as a greenhouse plant, and is in flower for a considerable time in succession.

An upright shrub with a hardish wooded stem, covered with a light brown bark and branched; *branches* opposite or solitary, upright, patent, round, downy, sometimes reddish. *Leaves* opposite, wideset, widespread, firm, hardish, oblongly or ovately lanceolate, 3 times broader than long or more, downy, minutely and ciliately serrate, far tapered, towards the petiole very shortly so, slightly roughened at the upper surface, larger ones about two inches long; *petioles* joined by the intervening stipules, often red, many times shorter than the blade: *stipules* double, subulate, pressed flatly to the stem. *Peduncles* terminal, solitary, scarcely twice the length of the petioles, 3- or sometimes many-flowered and once trichotomous, furnished with two subulate or sometimes foliaceous bractes; pedicles shorter than the calyx. *Flowers* nodding, turning from deep yellow to deep red, scarcely exceeding an inch in length, without scent, not unfrequently with one of each of their four component parts suppressed. *Calyx* short, 4-parted, slightly villous, spreading, continuous with the outer covering of the germen; *leaflets* lanceolately subulate, separated by broad sinuses. *Corolla* trumpet-shaped, not pubescent, obtusely 4-cornered: *tube* very long, tapered downwards, smooth throughout the interior: *limb* many times shorter, 4-parted, widespread, segments ovately tapered, equal, firm, stiffish, recurved. *Stamens* alternate with the segments, even with the tube to which they are wholly adnate: *anthers* sessile at the orifice of the tube, brown, linearly oblong, upright, fronting inwards, fixed at the middle of their backs. *Germen* oblate, downy, 2-locular, 2-seeded? *style* capillary, shorter than the tube: *stigmas* 2, white, linearly lobeshaped, upright, subconnivent.

Obs. *Lebeckia contaminata*, *v.* 2. *fol.* 104, of this work, is certainly the species of the Banksian Herbarium and of the Hortus Kewensis; we are however convinced that it is not that of either Linnæus or Thunberg; but the *Indigofera filifolia* of the latter. We shall explain further in the Appendix to this volume.

IRIS dichotoma.

Afternoon Iris, or Scissor-plant.

TRIANDRIA *MONOGYNIA.*

Nat. ord. ENSATÆ. *Linn. ord. nat. VI. Nobis in Ann. of Bot.* 1. 219.

IRIDES. *Jussieu gen.* 57. IRIDEÆ. *Brown prod.* 302.

IRIS. Spatha communis bivalvis, 1-pluriflora, conduplicata, alias simplices unifloras includens. *Cor.* supera tubulosa 6-fida tubo interdùm pleno v. hexapetalo-partita, ampla, involuto-emarcescens, rarò ad ungues se contorquens; *laciniæ* æquales ad perinæquales, sæpiùs biformes alternæ inter se similes; *interiores* sæpiùs erectæ, quandòque supernè reflexæ, rarò expansione exteriorum; *exteriores* laminâ constantèr reflexâ, ungue sæpiùs intùs barbato v. in longum carunculato. *Stylus* triqueter. *Stig.* petaliformia, erectiuscula, bilabiata, fornicata labio interiore 2-partito, exteriore brevi diploioideo membranoso. *Stam.* basi laciniarum exteriorum inserta, faciebus interangularibus stigmatum opposita: *anth.* erectæ, lineares, extrorsùm versæ. *Caps.* coriacea v. chartacea, oblonga v. columnaris, obtusè acutève 3-gona, rariùs 6-gona, 3-loc., loculamentis polyspermis, 3-valv. valvis septigeris. *Sem.* horizontalia, septi margini interno utrinque annexa, globosa v. pressione variè deformata, glabra v. punctato-scabra: *albumen* durum.

Herbæ *perennes:* radix *rhizoma repens divisum, rarò tuberiforme bulbiceps, interdùm bulbus laxiùs tunicatus, nunquàm (ac constantèr in proximâ* MORÆÂ) *bulbo-tuber.* Folia *ensiformia, collaterali-disticha, modò canaliculata et transversè bifaria, rarò tetraquetra.* Caulis *subnullus subterraneus simplex ad tripedalem ramosum.*

Div. Radice crassâ, solidâ, horizontali.

I. *dichotoma*, bi-4 flora, caule gracili, foliis amplexicauli-equitantibus lanceolatis plurimùm altiore, floribus pomeridianis longè pedunculatis ad basin usque partitis laciniis intimis bilobis; labio exteriore stigmatum intùs villoso.

Iris dichotoma. *Pall. it.* 3. 713. *t. A. f.* 2. *Lin. suppl.* 97. *Thunb. Ir. n.* 13. *Willd. sp. pl.* 1. 230. *Hort. Kew.* 1. 70. *ed.* 2. 1. 120. *Vahl enum.* 2. 136.

Iris dichotoma latifolia variegata procerior. *Amm. ruth.* 103.

Folia *infernè caulina, subseptena, semipedalia v. ultrà, saturatè viridantia, infra unciam lata, collaterali-disticha.* Caulis *sesqui-bipedalis, teres, congenerum gracilior,* PARDANTHI chinensis *similis, dichotomus cum axillâ acutâ,* ramis *sæpiùs elongatis subisometris nudis simplicissimis, foliolo ad basin.* Flores *elongato-pedunculati, congenerum minimi, violaceo-purpurei, inodori, post meridiem se expandentes, fugaces, ad limbum involutìm emarcescentes, ad ungues contortìm.* Cor. *6-petalo-partita, sub-v. omninò imberbis, 1¼ unciæ profunda:* lac. *cuneato-oblongæ unguibus erecto-patentibus,* ext. 3 *laminâ reflexâ duplo ferè breviore ungue albo et violaceo variegato;* int. 3 *parùm altiores exteriorum ungue, laminâ brevissimâ bilobo-fissâ dentibus inter lobos.* Stig. labium interius *lobis contiguis lanceolato-cuspidatis margine revolutis,* exterius *exiguis dentiformibus recurvatis intùs villosis.* Germ. *rotundatè 3-gonum semunciale diametro pennæ corvinæ.*

The rarest species of its genus in our collections, and marked by more than one striking anomaly. Its foliage and stem partake considerably of the habit of those in PARDANTHUS *chinensis*, or China-Ixia, though they differ in verdure; the stem is proportionably the slenderest in the genus; the flowers the smallest, never expand until after mid-day, and collapse before night by a twofold inflexion, rolling inwards at the limb or upper portion, and twisting spirally together at the ungues or lower. The laminæ of the inner segments are two-lobed, and the lobes of the outer lip of the stigmas villous at the upper surface. We did not perceive pubescence of any kind on the ungues of the outer segments, though these are said by Pallas to exhibit a few fine scarcely perceptible villi.

Native of Dauria, where it is called *Cheitschi* (Scissors) in the Mogol dialect, from the form of the fork produced by the two branches; the lower of which however is not always elongated to the length of the other, and then the appellation does not apply. Stated to have been introduced by Mr. John Bell in 1784, but we suspect that the plant from which the drawing was made is the only one now in this country. This had been raised from seed received from the Berlin garden, under the name of IRIS *pomeridiana*, by Messrs. Whitley and Co. of the Fulham nursery, where it flowered in August last; and was found to do very well in the open ground on a warm sheltered border.

Rootstock horizontal. *Leaves* about 7, equitant, clasping the lower part of the stem, lanceolate, 6 inches or more in length, scarcely one broad. *Stem* 1½ to 2 feet high or higher, round, slender, generally dichotomous; *branches* long and generally equal, leafless, simple, with a small leaf at their base. *Flowers* with long peduncles, of a violet-purplish colour, scentless, of short duration. *Corolla* six-parted to the base, entirely or nearly beardless, 1 inch and ¼ deep: *segments* cuneately oblong; *ungues* from upright, spreading; the *laminæ* of the 3 *outer* nearly twice shorter than the white and purple figured ungues: 3 *inner* but little longer than the ungues of the outer ones, with a very short lamina divided into two lobes with intermediate teeth. The lobes of the *inner lip* of the *stigmas* lanceolate contiguous at the inner edges and rolled back at the outer; the *outer lip* bifid, lobes villous on the inside.

a
b

SILENE pensylvanica.

American Wild-pink.

DECANDRIA *TRIGYNIA.*

Nat. ord. CARYOPHYLLEÆ. *Jussieu gen.* 299. *Div. V.* Calyx tubulosus. Stamina alterna hypogyna, alterna sæpiùs epipetala. Styli 2 aut 3 aut 5.

SILENE. Cal. tubuloso-ventricosus 5-dentatus. *Pet.* 5 unguiculata, ad faucem 2-dentata, suprà sæpè bifida. *Caps.* 3-loc. apice 5-fariàm dehiscens. *Pedunculi uni- aut multiflori, axillares aut terminales aut ex dichotomiâ caulis. Species quædam basi suffrutescentes, una muscoides cæspitosa.* Juss. loc. cit. 302.

Div. Petala ad faucem coronata. Floribus ex dichotomiâ caulis.

S. *pensylvanica,* viscido-pubescens; foliis cuneatis, caulinis lanceolatis, cauliculis in summitate paucifloris, petalis obtusissimis levitèr emarginatis subcrenatis. *Michaux bor-amer.* 1. 272.

Silene pensylvanica. *Pursh amer. sept.* 1. 316; *(exclusâ* S. virginicâ *Willd.) Persoon syn.* 1. 498. *Bigelow flor. boston.* 110.

Silene incarnata. *Loddiges's botan. cabin. t.* 41.

Silene caroliniana. *Walt. car.* 244; *(tantummodò quoad varietatem cum petalis utrinque carneis; suspicamur enim speciem ad minimum in duas separandam fore).*

Humilis, subquadriuncialis. Folia inferiora *lanceolato-cuneata biuncialia v. magis, angusta, elongata, infernè versùs canaliculata et petiolatìm attenuata, firmula, villis asperiusculis marginata:* superiora *breviora lineari-lanceolata, opposita atque basi subvaginoso-connata, hirsutiùs villosa.* Caulis *(sæpiùs plures) villosus, asperiusculus strictus, supernè trichotomo-cymosus, pluriflorus, pedunculo intermedio trichotomiarum unifloro.* Flores *superiores subfasciculato-approximati,* pedunculis *viscoso-villosis connatìm bibracteatis.* Cal. *subuncialis cylindricus, pro genere angustus, rubro-viridans, viscido-pubescens, sulcatus sulcis* 10 *herbaceis prominentibus cum totidem depressis membranosis roseis diaphanis alternis.* Cor. *rosea;* pet. unguibus *æquantibus calycem et pro longitudine stipitis germinis cum eo in cylindrum conferruminatis: laminâ oblongo-cuneatâ, breviore calyce, crenato-truncatâ, lamellulis 2 dentiformibus concoloribus brevibus ad basin.* Stam. *alterna corollæ unguibus inserta, alterna summo stipiti germinis, exsuperantia calycem.* Styli 3, *exserti, recurvati, apice subrosei.* Germ. *oblongum, 3-plo brevius stipite.*

The SILENE *virginica* of Linnæus, and the SILENE *Catesbœi* of Walter, have been adopted by Willdenow as distinct species, and placed in different sections of the genus, though he has quoted Pluknet's plant as a synonym to both: and in fact they are one and the same species, in as far as Pluknet's and Catesby's plant is included as a variety in *caroliniana.* Mr. Pursh cites Willdenow's *virginica* to Michaux's *pensylvanica,* the former being that of Linnæus, the latter the

one now represented and very distinct from the other. In the Banksian Herbarium, *virginica* is exemplified by three plants of distinct species, the one the true Linnean species taken up from Gronovius, the other the present, and the third a plant that we believe is included as a variety by Walter in his SILENE *caroliniana*, along with the Linnean *virginica* and the present *pensylvanica*.

Our plant is not published in the Hortus Kewensis. The drawing was made from one that flowered in the nursery of Messrs. Frasers, in Sloane Square, and had been imported this year from America, together with the best chosen and largest collection of plants of that country, which has ever reached England. An assemblage collected at various points from Canada to New Orleans, and has employed Mr. Fraser nearly two years in putting together.

A dwarf plant, about 3 or 4 inches high. *Lower leaves* cuneately lanceolate, narrowly elongated, channelled at the lower part and tapered like a petiole, rather firm, fringed with a roughish nap: *upper* short, linearly lanceolate, opposite and connate into a short sheath, shaggily villous. *Stem* (oftenest several) roughishly villous, stiff, at the upper part trichotomously cymose, several-flowered, the central peduncle of every trichotomy one-flowered. Upper *flowers* gathered into a sort of fascicle; *peduncles* viscously villous, with small connately double bractes. *Calyx* about an inch long, cylindrical, narrow for this genus, dull red and green, viscously pubescent, fluted, with ten raised green lines. *Corolla* pink: *petals* with ungues equal to the calyx, and cylindrically concrete with the pedestal of the germen: *lamina* cuneately oblong, shorter than the calyx, crenulately truncate, with two small short tooth-shaped scales at the base of the same colour. Alternate *stamens* inserted on the unguis of the petals, the others at the top of the pedestal of the germen, all protruding above the calyx. *Styles* 3, above the calyx, recurved, pink at the top. *Germen* oblong, 3 times shorter than its pedestal.

Native of Pensylvania. Hardy.

Pub^d by Ridgway

GRINDELIA inuloides.

Willdenow's Grindelia.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Corymbiferæ. *Jussieu gen.* 177. *Div. II.* Recept. nudum. Sem. papposum. Flores radiati.

GRINDELIA. Suprà fol. 187 *sub* Doniâ, *nomine cum* Grindeliâ *priùs evulgatâ commutando.*

G. *inuloides*, foliis subpandurato-oblongis supernè serratis cauleque pubescentibus: pappo simplicissimo lævi.

Grindelia inuloides. *Willd. in Mag. d. gesell. naturf. fr. zu Berlin.* 1807. 261. *Ejusd. enum.* 894.

Aster spathularis. *Broussonnet ined.*

Caulis *erectus, sesqui-bipedalis, ramosissimus (basi suffruticosus. W.)*: rami *subteretes, hirsuti, foliosi, ramulosi, ramulis sparsis distantibus subcorymbosis patentibus foliosis.* Fol. *sparsa, distantia, erecto-patentia, subsemiamplexicaulia, scabriuscula, lanuginosa, ad nervos hirsutiora, reticulato-venosa,* majora *brevè acuminata, acuta, basi cordata, subtriuncialia, latitudine ¾ unciæ, pallido-virentia;* minora *pandurato-lanceolata.* Flores *solitarii, terminales, brevè pedunculati v. subsessiles, flavissimi, sesquiunciam v. magìs transversi.* Cal. *herbaceus, squarrosus,* foliolis *lineari-lanceolatis, infrà appressis, suprà recurvo-recedentibus,* exterioribus *brevioribus,* interioribus *æqualibus disco, subviscidis, glabris, ciliato-serrulatis.* Corollulæ fem. radii *plurimæ, uniseriatæ, ligulato-lanceolatæ, revoluto-emarcescentes;* tubo *gracili viridante 2-3-plo longiore germine:* stig. 2 *tenuia vitellina:* germ. *oblongum, glabrum, subangulosum:* pappus *ex setâ unâ v. duobus caducis lævibus, haud æqualibus disco:* corollulæ disci *clavato-cylindricæ, flavæ, glabræ, 4plo longiores germine, limbo plurìes breviore fauce laciniis acutulis erectis.* Pollen *flavum.* Stylus *elasticus vi propriâ se extendens iterùmque retrahens, non tamen à tactû ad motum spontaneum excitandus ac in* Arctotidis, *luteus ut* stigmata, *quæ linearia villosa patentia exserta. Corollulæ periphæriæ disci basi rubro-fusco notatæ.* Receptac. *foveolatum, dentato-scabratum, convexum.*

The style of the pistils of the disk in this plant, though these are fertile, appears to be elastic, and endowed with the faculty we have ascribed to that of the barren pistils in Arctotis, viz. of raising and lowering the stigma by alternate extension and contraction; but it does not seem in this instance combined with the irritability evinced in the former, by spontaneous motion responsive to the excitement of the touch, and which may in fact be confined to the style of those pistils, which are destined for mere auxiliaries in the functions of the stamens, but are ineffective in their proper capacity.

The drawing was made from a specimen kindly sent us by Mr. Lambert from Boyton House, his seat in Wiltshire, and had been raised from seed received from Mexico, where the species was first observed by Messrs. Humboldt and Bonpland. It may be considered as a hardy greenhouse plant.

We have been guided, in regard to the name of the genus, by the following passage in Mr. Brown's learned and instructive tract on the natural order to which the plant belongs, published in the Linnean Transactions.

" GRINDELIA, described by Willdenow in the Transac-
" tions of the Natural History Society of Berlin for 1807,
" and subsequently in his Enumeratio Plantarum Horti
" Berolinensis, flowered in Kew Gardens for the first time
" in 1815, when I had an opportunity of examining it, and
" of determining its very near affinity with DONIA, a genus
" proposed in the 2d edition of the Hortus Kewensis, and
" adopted by Mr. Pursh in his Flora of North America: the
" principal distinction between these two genera consisting
" in a difference of the number of radii of the pappus,
" which in GRINDELIA is described by Willdenow as of two
" rays, and according to my observations has more fre-
" quently one only. But as even in DONIA the number of
" rays, though indefinite, is variable, and the structure of
" the pappus is very nearly similar in both genera, which in
" all other respects agree, it may be perhaps expedient to
" unite them under the name of GRINDELIA, which was first
" in order of publication."

Stem from one and a half to two feet high, suffrutescent at the lower part. *Leaves* scattered, distant, halfstemclasping, *larger* about 3 inches long and $\frac{2}{3}$ of an inch broad, panduratcly oblong, somewhat roughened, villous and more shaggily so along the nerves, nettedly veined, shortly pointed, cordate at the base. *Flowers* yellow, solitary, terminal, with short or nearly obsolete peduncles. *Calyx* herbaceous, squarrose; *leaflets* linearly lanceolate, interior ones subviscid, smooth, ciliately serrate. *Florets of the ray* rolling back as they fade; *tube* slender, greenish, 2 or 3 times shorter than the *germen*, which is oblong, smooth, and rather angular: *pappus* of one or two smooth caducous bristles: *florets of the disk* clavately cylindrical, yellow, smooth, 4 times as long as the germen; *limb* several times shorter than the faux, with sharpish upright segments. *Receptacle* pitted, membranously toothed, convex.

BIGNONIA venusta.
Welted Trumpet-flower.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. Bignoniæ. *Jussieu gen.* 137. *Sect. II.* Fructus capsularis bivalvis. Caulis arboreus aut frutescens.

Bignoniaceæ. *Brown prod.* 471.

BIGNONIA. *Cal.* 5-fidus, cyathiformis. *Cor.* fauce campanulata, 5-fida, subtùs ventricosa. *Siliqua* 2-locularis. *Sem.* membranaceo-alata. *Willd. sp. pl.* 3. 289.

Arbores aut frutices; folia opposita, nunc impari-pinnata aut ternata, nunc conjugata petiolo diphyllo inter foliola sæpè cirrhoso; flores paniculati. Juss. l. c.

Div. Foliis conjugatis.

B. *venusta*, scandens; foliis glabris, inferioribus ternatis ecirrhosis, superioribus conjugatis cirrhosis, foliolis oblongo-ovatis acuminatis basi inæquilateri-obliquis, petiolis intùs villosis; calyce brevi cylindrico-rotato æquali denticulis 5 teretibus villosis invicèm distantibus, pedunculis corymboso-plurifloris.

Frutex *altè latèque scandens, ramosus, badio-corticatus.* Folia *opposita, inferiora ternata absque cirrhis, superiora conjugata cum cirrhis;* foliola *glabra, nitida, saturatè viridia, oblongo-ovata acumine producto obtuso, utrinque glandulis minutis immersè et laxiùs punctata, distantiùs nervosa, sub4uncialia latitudine 2 unciarum cum dimidio v. circitèr, basi inæquilatera, juniora margine apiceque subpubescentia:* petioli *intùs canaliculati, canaliculo villoso-ciliati, cæterum glabri,* partiales *breviores* communi *subunciali.* Cirrhi *duriusculi, spirales, simplices, v. supernè trichotomi, herbacei, axillis petiolorum partialium hìnc inserti.* Flores *terminales (axillaresque?) corymbosi, 4-6-pluresve, vividissimè miniati;* pedunculus communis *brevis crassus subglaber,* pedicelli *altiores petiolo communi, teretes, firmuli, curvuli, erectiusculi, paulò supra basin* bracteolis 2 *minimis oppositis singulâ rudimentum diminutum floris abortivi fovente.* Cal. *inferus, infrà cylindricus, suprà rotato-campanulatus, viridiusculus, sublanuginosus, altitudine trilineari v. circitèr, margine villosus, mucronulis 5 villosis distantèr dentatus.* Cor. *hypogyna, sub3uncialis, clavato-elongata, cylindrico-campanulata, extùs glabra atque nitida:* tubus *angustus, cylindricus, subuncialis, rectus, intùs pilosus:* faux *de tubo sesquibreviore paulatìm ampliata, oblonga, dorso compresso-declivis, gibbosa, ventre cum tubo rectiùs continua planior distentiorque, intùs rugulosa infràque subpilosa:* limbus *5-partitus, ringens, duplo ferè brevior fauce,* laciniis *subæqualibus, oblongis, 4 lineas v. circà latis, obtusulis cum brevi acumine, intùs supernè versùs lanuginosis, lineâ albâ tomentosâ margine interno circumscriptis;* labii summi 2 *erecto-recurvulis contiguis invicèmque duplo breviùs quàm à proximis lateralibus partitis, subangustioribus;* labii imi 3 *patentioribus invicèm distantioribus, mediâ à collateralibus profundiùs divisâ.* Stam. *ascendentia, longiora 2 medium limbum attingentia:* fil. *imæ fauci inserta, 2 longiora labio imo, 2 breviora labio summo opposita, glabra, rubida, quintum rudimentum breve setaceum sterile:* anth. *luteæ, bicruri-duplicatæ, loculis linearibus, apice ad insertionem cum filamento à receptaculo minimo connexis.* Germ. *virens, teres, papilloso-scabratum, primò*

vix crassius stylo continuo, duplo altius calyce, disco proprio *viridi duriùs carnoso parte angustiori calycis conformi et recondito insidens:* stylus *æquans stamina, albus, filiformis:* stigma *foliaceum, bipartitum, pallidum, lamellis membranosis tenuibus ellipticis cum brevi acumine à paginâ interiore oppositis.*

Of this genus, eminent for the beauty of its blossom, about 60 species have been recorded, all trees or shrubs and many of them climbers. The majority belong to tropical regions; Virginia and Japan are we believe the farthest points to which any recede from the equator. Only one species has been discovered in New Holland, and one at the Cape of Good Hope; the bulk is indigenous in South America. The subject of this article has been recently received from the Brasils by Lady Liverpool, and flowered this autumn in the hothouse at Combe Wood, the residence of Lord Liverpool. As far as we can trace, the species has not been noticed in any publication. On the score of ornament there cannot be a more desirable acquisition for our collections. It grows naturally in the neighbourhood of Rio Janeiro, and the gardener who raised it from seed, thinks that it will be found to be as hardy as the common Blue Passionflower, which comes from the same country, and is known to every one. It spreads itself on all sides, and continues to produce large bunches of flowers for a long time in succession from the ends of the branches.

A climbing shrub, with a reddish brown bark, dividing into numerous branches. *Leaves* opposite, lower ones ternate and without tendrils, upper ones conjugate or pinnate, with one pair of leaflets, and furnished with tendrils; *leaflets* smooth, deep green, oblong-ovate with a blunt extended point, loosely dotted on both sides with minute glands, which are sunk in the surface, distantly nerved, about 4 inches long and 2½ broad, unequally sided and slanting at the base, the younger ones slightly pubescent at the margin and summit: *petioles* channelled on the inside, the channel being villously edged, smooth as to the rest, *partial ones* shorter than the *general one* which is about an inch long. *Tendrils* or *claspers* hardish, spiral, simple or trichotomous at the top, herbaceous, inserted at the base of the fork of the partial petioles. *Flowers* terminal, 4-6-or more in corymbs, of a vivid orange-vermilion colour; *common peduncle* short, thick, and nearly smooth, *pedicles* higher than the common petiole, round, firm, upright,

slightly curved, furnished a little above the base with two small *bractes* each guarding the small rudiment of an abortive flower. *Calyx* inferior, cylindrical at the under part, rotately campanulate at the upper, greenish, somewhat downy, about 3 lines deep, villous at the margin, and toothed with five small wideset villous dagger-points. *Corolla* hypogynous, about 3 inches long, clavately elongated, cylindrically campanulate, smooth and shining on the outside: *tube* narrow, cylindric, about an inch long, straight, with hairs on the inside: *faux* gradually enlarged from the tube and about half as long again as that, oblong, gibbous and compressedly attenuated at the back, at the front forming nearly a straight line with the tube, flatter and more distended, wrinkled on the inside with a few hairs: *limb* 5-parted, ringent, nearly twice shorter than the faux; *segments* nearly equal, oblong, about 4 lines broad, bluntish with a short point, surrounded at the inner margin by a white tomentose narrow welt, downy towards the top on the inside, *the two of the upper lip* upright, slightly recurved, contiguous, and scarcely by half so far parted from each other as they are from their two immediate side-ones, rather narrower than the rest; *the three of the lower lip* more spreading, set at wider distances from one another, and the middle one deeper parted from the side-ones than any of the rest are among themselves. *Stamens* ascending, the two longer ones reaching to about the middle of the limb: *filaments* inserted at the base of the faux, the two longer ones being placed opposite to the lower lip, and the two shorter ones to the upper, smooth, reddish, the fifth a short bristle-shaped antherless rudiment: *anthers* yellow, oblong, didymous, of two linear cells which are connected at the top by a very small receptacle, in which the filament is inserted. *Germen* green, round, papulously roughened or chagreened, at first scarcely thicker than the style with which it is continuous, twice as high as the calyx, resting upon a green basement of a hardish fleshy substance, of the same form as the lower portion of the calyx in which it is concealed: *style* equal to the stamens, white, filiform: *stigma* of two membranous thin elliptic whitish laminæ with a short point, and placed opposite to each other broadways.

We have seen plants of this species, derived from the present stock, both at Messrs. Whitley, Brames, and

Milne's, of the Fulham nursery; and at Messrs. Colville's nursery, King's Road, Chelsea.

a The calyx and pistil. *b* The lower portion of the corolla dissected to show the insertion of the stamens.

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ASCLEPIAS incarnata.

Rose-coloured Swallow-wort, or Water Silkweed.

PENTANDRIA *DIGYNIA.*

Nat. ord. APOCINEÆ. *Jussieu gen.* 143. *Div. II.* Germen duplex. Fructus bifollicularis. Semina papposa.

ASCLEPIADEÆ. *Brown asclep.* 19. *Div. I.* ASCLEPIADEÆ VERÆ.

ASCLEPIAS. Suprà vol. 1. *fol.* 76.

A. *incarnata*, caule erecto supernè ramoso tomentoso, foliis lanceolatis utrinque subtomentoso-lanuginosis, umbellis pluribus origine geminis, corniculis appendicum exsertis. *Pursh amer. sept.* 1. 181.

Asclepias incarnata. *Linn. sp. pl.* 1. 314. *Mill. dict. ed.* 8. *n.* 9. *Hort. Kew.* 1. 307. *ed.* 2. 2. 82. *Jacq. hort. vindob.* 2. 49. *t.* 107. *Willd. sp. pl.* 1. 1267. *Mich. bor. amer.* 1. 115.

A. caule erecto ramoso annuo, foliis lanceolatis, umbellis terminalibus erectis plurimis. *Gron. virg. edit.* 1. 27.

Apocynum minus rectum canadense. *Corn. canad.* 9. *t.* 93. *Barrel. ic.* 72.

(β) pulchra. *Pursh l. c.*

Asclepias pulchra. *Willd. sp. pl.* 2. 1267. *Bigelow flor. bost.* 63.

Herbacea, perennis. Caulis *erectus, purpureo-virescens, foliosus, supernè opposito-ramosus, lanuginosus (v. tomentosus ex P.) subcompresso-cylindricus, obscurè angulatus v. striatus, infernè glaber, nitens, crassitudine digiti.* Folia *opposita, distantia, oblonga, lanceolata, semipedalia latitudine plus quàm sesquiunciali, subtùs varicoso-nervosa, subrugato-venosa, sublanuginosa, nube conspicuiore ad nervos et venas inque junioribus, basi subovata v. subcordata;* petiolis *vix* ¼ *unciæ longioribus, canaliculatis, basi tomentosis, cæterùm lanuginosis.* Flores *caulis ramorumque terminales, fragrantes, carneo-purpurascentes:* umbellæ *plurimæ pluriès, at uno versû dichotomæ, congesto-fastigiantes inferiores foliis* 2, *superiores bracteis* 2 *interpositæ.* Pedunculi communes *subrubentes, longiores pedicellis, lanuginosi, subbiunciales ad brevissimos, robusti.* Involucrum *parvum, purpureum, triplo brevius pedicellis, radiatum, modò retroflexum, lanuginosum, foliolis angustissimis subulatis.* Umbellæ *multiradiatæ, subcapitato-convexæ,* pedicellis *fine extumido carnoso* pedunculi communis *undique insertis,* 3-*plo circitèr longioribus corollâ, lanuginosis, ebracteatis, teretibus, sursùm attenuatis.* Cal. *extùs lanuginosus, rubido-virens, reflexus, plùs duplo brevior corollâ, segmentis ovato-acuminatis v. lanceolatis.* Cor. *glabra, reflexa, laciniis lanceolato-oblongis, acutis:* corona staminea *carneo-pallescens remotè à plano corollæ infra medium* columnæ *pro* ¼ *longitudinis suæ striato-teretis et paulò inclusæ imposita;* foliola cucullata *ovato-oblonga orificio obliquo retuso, cornicula alba gracilia super stigma conniventia exserentia.*

A hardy species, according to the Hortus Kewensis cultivated with us before 1710. It had been divided into two by Willdenow, which have been justly united again by

other botanists; the chief difference between the plants consisting in the degree of pubescence, which is proved to depend upon circumstances not controlled by the nature of the species. Native of North America; where it is very common in swamps and on the banks of rivers. Flowers in July and August.

An herbaceous perennial plant. *Stem* upright, purplish green, downy or tomentose, leafy oppositely branched, cylindrical and slightly compressed, obscurely fluted or angular, smooth and shining below, and about the thickness of the finger. *Leaves* opposite, distant, oblong, lanceolate, about half a foot long and more than an inch and half broad, varicosely nerved beneath and somewhat wrinkled, downy, with the pubescence more conspicuous at the nerves and veins, subovate or subcordate at the base; *petioles* short. *Flowers* terminating both stem and branches, of a purplish flesh colour, with a fragrance that seems to have some resemblance to that of the Peruvian Heliotrope: *umbels* numerous, repeatedly dichotomous, crowdedly fastigiant, lower ones placed between two leaves, upper between two bractes. *Common peduncles* reddish, longer than the pedicles, downy, from about two inches long to very short, thickish. *Involucre* small, purple, 3 times shorter than the pedicles of the rays, radiate, sometimes reflectent, downy; *leaflets* very narrow, subulate. *Umbels* many-rayed, nearly as convex as capitula; *pedicles* inserted round about the enlarged fleshy head of the peduncle, about three times as long as the segments of the corolla, downy, round, and tapered upwards. *Calyx* externally downy, reddish green, reflectent, more than twice shorter than the corolla, with ovately acuminate or lanceolate segments. *Corolla* smooth reflectent, segments lanceolately oblong acute: *stamineous crown* of a pale flesh colour, placed at about two thirds below the top of the column, which in the space between that and the plane of the corolla is round and fluted: the *cucullated leaflets* ovately oblong, with a slanting retuse orifice, putting out from their bottom small white slender horns that converge over the stigma.

The drawing was taken at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

a A leaflet of the stamineous crown. *b* Shows the pollen-masses appended to the stigma.

DIGITALIS lutea.

Small yellow Fox-glove.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARIÆ. *Jussieu gen.* 117. *Div. I.*
SCROPHULARINÆ. *Brown prod.* 433. *Sect. II.*
DIGITALIS. *Suprà vol.* 1. *fol.* 48.

D. *lutea*, foliolis calycinis lanceolatis, corollis acutiusculis labio superiore bifido; inferiore intùs barbato, foliis glabris. *Brown in Hort. Kew. ed.* 2. 4. 29.

Digitalis lutea. *Linn. sp. pl.* 2. 867. *Mill. dict. ed.* 8. *n.* 3. *Hort. Kew.* 2. 345. *Jacq. hort. vindob.* 2. 47. *t.* 105. *Willd. sp. pl.* 3. 285. *Baumgarten en. stirp. transylv.* 2. 212.

Digitalis parviflora. *Allion. pedem.* 1. 70. *n.* 257. *Lamarck & Decand. fl. franç.* 3. 597; *(nec aliorum.)*

Digitalis foliis calycinis lanceolatis, galea bifida, floribus immaculatis. *Hall. helv.* 332.

Digitalis lutea, minore flore. *Riv. monop. t.* 105.

Digitalis lutea parva. *Lob. ic.* 573. *f.* 2.

Digitalis minor lutea sive pallida. *Park. par.* 382. 7.

Herba perennis. Caulis *teres, simplex, bipedalis v. ultrà, partìm angulosus, infernè confertiùs foliosus.* Fol. *sessilia, decurrentia, numerosa, undique sparsa, erectiuscula, 5-uncialia v. multò magis, lanceolata, infra unciam lata, serrata, glabra, nervosa nervis ascendentibus, decrescentia.* Racemus *terminalis spicatus, primò nutans, non densus,* 10-*uncialis v. circà, secundus.* Bracteæ *foliaceæ, lanceolatæ, cuspidatæ, villosiusculæ præsertìm ad marginem, breviores flore, decrescentes.* Pedicelli *subæquales calycibus v. aliquantùm breviores.* Cal. *herbaceus, subbilabiatus, vix triplo brevior corollâ, segmentis lanceolatis, subinæqualibus, margine villosis, 3 summis minoribus medio parùm breviore.* Cor. *lutea, lanuginosa, infundibuliformis,* $\frac{3}{4}$ *unciæ longa;* tubus *æqualis calyci;* faux *subtùs ventricosa;* limbi laciniæ *acutulæ, intùs villosæ;* labii superioris *breviùs cæteris, invicèm divisæ, erectiùs recurvatæ, conniventes;* labii inferioris *recurvo-patentes, divaricatæ, basi puncto gemino atropurpureo pictæ, ima media triplo v. ultrà latior lateralibus suis, ovato-acuminata recurvo-porrecta intùs pilis longis erectis barbata.* Stam. *inclusa:* fil. *chloroleuca, glabra,* anth. *luteæ, didymæ, loculis oblongis.* Germ. *oblongo-pyramidatum, viride, villosum;* stylus *rostrato-continuus, villosiusculus;* stigma *punctum bifidum, v. tandèm transversè bifido-dehiscens.*

A hardy perennial plant, native of the south of France, Italy, and Transylvania, where it is found on stony mountainous places in the shade. Cultivated in this country by Parkinson before 1629. In the *Flore Française* above cited, we find the name of *lutea,* by which the species has been generally known from the time of Linnæus till now,

not only changed to one which is less pertinent, but to one by which another species of the same genus has been long since universally known.

Stem two feet high or more, round, simple, partly angular, thickly leaved below. *Leaves* sessile, decurrent, numerous, scattered all round, 5 inches long or much longer, lanceolate, less than an inch broad, decreasing to very small, smooth, serrate, nerved, nerves ascendent. *Raceme* terminal, spiked, at first nodding, not very close, from 6 to 10 inches long, the flowers inclining one way. *Bractes* leafy, lanceolate, sharp-pointed, slightly villous especially at the edge, shorter than the flowers, decrescent. *Pedicles* nearly as long as the calyx or considerably shorter. *Calyx* herbaceous, subbilabiate, scarcely 3 times shorter than the corolla; segments lanceolate, somewhat unequal, villous at the edge, 3 upper ones smaller, the middle one being a little shorter than the two on each side. *Corolla* yellow, downy, funnelform, two thirds of an inch long; *tube* equal to the calyx; *faux* protuberant underneath; *segments of the limb* rather pointed, villous on the inside; those of the *upper lip* more shallowly divided from each other than any of the rest, erectly recurved, connivent; of the *lower lip* spreadingly recurved, divaricate, 2 side ones marked with a double red spot at their bases, the middle one 3 times wider than these or more, ovately pointed, jutting forwards, and recurved, bearded with long upright hair. *Stamens* enclosed: *filaments* greenish white, smooth: *anthers* yellow, didymous, with oblong cells. *Germen* oblong, pyramidal, green, villous; *style* continuous, slightly villous; *stigma* a transversely bifid point, sometimes opening.

The drawing was taken at Mr. Knight's nursery in the King's Road, Chelsea.

Dr. Roth has quoted a figure from Lobel to his Digitalis *media,* which seems to us no other than the repetition of the one he cites from the same author to *lutea,* but in a seeding state.

a Calyx and pistil. *b* Corolla dissected to show the insertions of the stamens.

GONOLOBUS diadematus.

Gorgetted Gonolobus

PENTANDRIA *DIGYNIA.*

Nat. ord. APOCYNEÆ. *Jussieu gen.* 143. *Div. II.* ASCLEPIADEÆ. *Brown asclep.* 19. *Div. I.* ASCLEPIADEÆ VERÆ. *Massæ pollinis* 10, læves, per paria, (diversis antheris pertinentia,) affixæ stigmatis corpusculis, sulco longitudinali, bipartibilibus. *Fil.* connata, extùs sæpiùs appendiculata. *Id. l. c.* 21.

GONOLOBUS. Massæ Pollinis læves, 10, transversæ. *Cor.* subrotata. *Sem.* comosa. *Brown in Hort. Kew. ed.* 2. 2. 82.

Suffrutices volubiles. Fol. *opposita, latiuscula. Umbellæ interpetiolares. Americæ præsertìm inter tropicos indigenæ.*

G. *diadematus,* hirsutus; foliis oblongis, ellipticis, lanceolatis, basi arctato-cordatis sinû clauso, corollæ laciniis ovato-rotundatis: coronâ faucem intùs de basi circumstipante.

Frutex *volubilis biorgyalis v. ultrà, caule infernè suberoso-fisso, ramis teretibus pilis articulatis asperiusculis fulvis hirsutis.* Fol. *distantia, membranacea, acuminata, hirsutiùs pilosa, nervosa, subtùs reticulato-venosa,* 2-4-*uncialia magisve:* pet. *crassiusculi, flexi, bis terve breviores laminâ:* cilia interpetiolaria *parùm conspicua.* Umbellæ *capitato-contractæ,* 3-5-*floræ, foliolis lanceolatis involucratæ;* pedunc. communi *robusto breviore petiolo,* pedicellis *brevioribus v. subæqualibus calyci, hirsutis, distinctis* bracteis *angustis.* Flores *luteo-virentes diametro subunciali.* Cal. *æqualis fauci, campanulatus, villosus, viridans, foliolis 5 ovato-lanceolatis.* Cor. *coriacea, urceolato-rotata, glabra, venis lineisque obscurioribus, intùs opaca, extùs lucida;* limbus *explanatus, ultra medium 5-fidus, laciniis obtusissimis;* faux *brevis urceolata;* corona staminea *faucis fundo adnata, purpureo-rubens, glabra, subemicans, è laminis subquadrato-scutellatis invicèm contiguis, parieti faucis accumbentibus, margine summo subtridentato-repandis, compagem stamineam (quâ clàm basi derivantur) liberè circumstantibus.* Stig. *albicans, depressum.* Anth. *quas non nisi visû fugitivo inspeximus, à dignose generis aliquantùm deflectunt habentque formam gigartoideam, neque corona apertè staminibus innata est: undè forte rectiùs novi generis species? Habitû verò cæterisque signis convenit cum* GONOLOBO*; nec aliorsùm propinquiùs accedere nobis videtur.*

An unrecorded species, which we have ranked in the present genus chiefly from habit or general likeness; for it has not precisely the transverse anthers, which constitute a prominent feature of GONOLOBUS, as now defined. Mr. Brown, who has so advantageously remodelled the natural order to which this genus belongs, seems inclined to think that the character should be extended to admit the present species, along with some others which he has not had an

opportunity of finally determining, rather than that a separate generic group should be founded on them. Besides the expressed difference, however, the anthers vary in form from those of all the described species of GONOLOBUS, and the stamineous crown, instead of growing distinctly upon the filaments, is grown to the bottom of the faux, while its connexion with the filaments can only be traced by attentive dissection.

The drawing was made from a specimen kindly sent us by Sir Abraham Hume, from his hothouse at Wormleybury. The species was introduced some few years ago from Mexico, by Mr. Lambert, who raised it at Boyton House from seed.

A twining shrub, 15 feet high or higher; *stem* corky and furrowed at the lower part; *branches* round, with a tawny fur; hairs articulated. *Leaves* distant, membranous, roughishly furred, elliptically oblong, lanceolately acuminate, contractedly cordate at the base, the lobes meeting together, from 2 to 3 inches long, and from an inch and a half to two inches broad, nettedly veined underneath: *petioles* thickish, bent, 2 or 3 times shorter than the blade; *interpetiolar fringe* but slightly distinguished from the general pubescence. *Umbels* in our specimen 3-5-flowered, capitately contracted, with an *involucre* or *ruffle* of lanceolate *leaflets: common peduncle* thick, shorter than the petioles, *pedicles* about the length of the calyx, separated by narrow bractes. *Flowers* greenish yellow, about an inch in diameter. *Calyx* equal to the faux, campanulate, villous, of five ovately lanceolate leaflets. *Corolla* coriaceous, urceo lately rotate with darker veins, smooth, opaque on the inside, shining without; *limb* flatly extended, five-parted to below the middle, segments rounded: *faux* short, urceolately tubular: *stamineous crown* light purple, grown to the bottom of the faux, of five squarish scutiform contiguous laminæ which ascend without adhesion along the wall of the faux to a little above its orifice, and are repand at the upper margin with a very faint triple indentation. *Stamineous column* equal to the crown. *Stigma* depressed, whitish.

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a The calyx. *b* Corolla. *c* Stamineous crown detached from the faux. *d* One pair of the pollen-masses, as they appear when suspended from the proper appendicle of the stigma.

CROTALARIA retusa.

Wedge-leaved East India Crotalaria.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Cor. irregularis papilionacea. Legumen 1-loculare 2-valve.

CROTALARIA. Suprà vol. 2. *fol.* 128.

C. *retusa*, foliis simplicibus oblongis cuneiformibus retusis, racemo terminali. *Willd. sp. pl.* 3. 976.

Crotalaria retusa. *Linn. sp. pl.* 2. 1004. *Mill. dict. ed.* 8. *n.* 7. *Vahl symb.* 1. 53. *Hort. Kew.* 3. 18. *ed.* 2. 4. 272. *Gærtn. sem.* 2. 316. *t.* 148. *fig.* 2.

Tandale-cotti. *Rheede mal.* 9. 45. *t.* 25.

Caulis *sesquipedalis ultràque, teres, lanuginosus, virens, striatus, rariùs ramosus, laxè foliatus.* Fol. *undique sparsa, plurimùm longiora intervallis, cuneato-oblonga, è mucrone recurvato retusa simulantia, subtùs sericeo-albicantia, suprà subglabra, pilis nonnullis præsertìm ad nervum conspersa:* petiolus *decurrens, brevissimus, crassus, subtùs lanuginosus, basi dilatatus;* stipulæ 2 *minutæ, subulatæ, hirsutæ, caducæ, vix oculo nudo percipiendæ.* Racemus *terminalis, pluriflorus, laxus, erectus,* pedunc. *breviores calyce, robusti appressè subvillosi,* bracteâ *ovato-subulatâ, rigidâ, refractâ, extùs hirsuto-sericeâ ad basin, aliisque 2 opposito-lateralibus minutis linearibus hirsutis patentissimis supra basin.* Cal. *bilabiato-campanulatus, subvillosus, segmentis 2 summis distantibus, imis 3 proximioribus.* Vex. *triplo longius calyce, luteum, oblato-orbiculatum, subretusum, unciam latum, extùs plicâ elevatâ subvillosâ per medium dorsi, erecto-reflexum, carinâ distans, glabrum, dorso fusco-venosum, et aliquâ suffusum rubedine, basi intùs dentibus binis anticis, ungue brevi fornicato tomentoso;* alæ *concolores, breviores, porrectæ, arctè complectentes carinam, suprà convoluto-imbricantes, cuneato-obovatæ, latæ:* car. *pallida, clausa, ventricosa ventre trans alas prominente, acuminata acumine abruptiùs arrecto obliquato, subtùs lineâ lanceolatâ tomentosâ, supra ad basin marginibus erectis profundè alata.* Fil. *ad medium usque monadelpha cum fissurâ dorsali, alterna firma v. extensa antheris parvis sub globoso-didymis ocyùs demittentibus pollen, alterna breviora primò flaccida v. detensa antheris pluriès longioribus lineari-attenuatis seriùs demittentibus pollen.* Germ. *complanatum, ensiforme, glabrum, polyspermum:* stylus *filiformis, erectus, hirsutus:* stig. *glandula brevis apici truncato styli præfixa, obliquè acuminata, pruinosa, pallida.* Legum. *oblongum, inflatum, cylindricum, mucronatum, polyspermum, horizontale:* sem. *(ex Gærtn.)* 15-*ad* 20, 3-*gono reniformia, uncinulato-rostellata.*

An annual species, native of the East Indies. Cultivated at Chelsea by Miller, in 1731; the seeds having been sent him from Holland by Boerhaave.

Stem herbaceous, toughly fibrous, a foot and half high or more, green, fluted, oftener unbranched than branched,

loosely leaved. *Leaves* scattered irregularly round the stem, much longer than the intervals, cuneately oblong, owing to the small point at the end being bent back appearing retuse, silky underneath, nearly smooth above, having only a few hairs, and those chiefly on the principal nerve: *petiole* decurrent, thick, very short, downy underneath, widened at the base: *stipules* 2, minute, subulate, shaggy, caducous. *Raceme* terminal, severalflowered, loose, upright; *peduncles* shorter than the calyx, robust, with a flat-pressed fur, an ovately subulate stiff reflex externally shaggy *bracte* at the base, and two other oppositely lateral very small linear shaggy widespread ones above the base. *Calyx* bilabiately campanulate, slightly villous, with the two upper segments wide apart, the three lower near together. *Vexillum* or *standard* three times longer than the calyx, yellow, oblately orbicular, slightly emarginate, an inch broad, reflexly erected, standing wide of the keel, smooth, with a deep slightly villous plait along the middle of the back, where it is marked with brown veins and in some degree red, two small teeth are placed within the front of the base and point forwards; *unguis* short, vaulted, tomentose; *alæ* or *wings* plain yellow, shorter, pointing directly forwards, embracing the keel, lapping over each other convolutely above, broad, cuneately obovate; *carina* or *keel* pale, ventricose, close, protuberant beyond the wings, acuminate with an abruptly raised once twisted point, marked along its under side by a lanceolate line of down, at the upper deeply winged by the folding together of the lips of the fissure. *Filaments* monadelphous to the middle, five alternate ones firm and extended, with small roundish anthers, which part the first with their pollen; the five others shorter with several times longer and linearly tapered anthers, at first unstrung and flaccid, but becoming firm and extended when their anthers part with the pollen, which they do much later than those of the others. *Germen* ensiform, flattened, smooth: *style* filiform, upright, shaggy: *stigma* a short gland upon the truncated apex of the style, pointed slantingly, pale, frosted. *Pod* oblong, inflated, cylindrical, with a longish dagger-point, horizontal. *Seeds* 15-20, triangularly kidney-shaped, with a small prominent hooked beak at one end.

a Calyx. *b* Vexillum or standard. *c* Alæ or wings. *d* Two petals forming the Carina or Keel. *e* Stamens. *f* Pistil.

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POLYGONUM frutescens.

Shrubby Polygonum.

OCTANDRIA *TRIGYNIA.*

Nat. ord. POLYGONEÆ. *Jussieu gen.* 82. *Brown prod.* 419.

POLYGONUM. (*Cal.* 0.) *Cor.* profundè 5-fida, (nunc 4-fida,) semi-calycina. *Stam.* 4-9. *Stylus* 2-3-partitus. *Stigmata* totidem, capitata. *Nux* corollâ (quandòque baccatâ) tecta. *Embryo* unilateralis.

Herbæ, *rariùs* Frutices. Folia *alterna, basi vaginantia, aut vaginæ intrafoliaceæ adnata, juniora subtùs revoluta.* Brown prod. 419.

Div. Atraphaxoides, *caule frutescente.*

P. *frutescens,* caule fruticoso, foliis lanceolatis utrinque attenuatis, ochrea lanceolata internodiis breviore, petalis binis exterioribus minoribus reflexis. *Willd. sp. pl.* 2. 440.

Polygonum frutescens. *Linn. sp. pl.* 1. 516. *Hort. Kew.* 2. 29. *ed.* 2. 2. 416. *Gærtn. sem.* 2. 182. *t.* 119. *f.* 5.

Polygonum fruticosum, floribus pentapetalis, octandris, trigynis, 2 externis petalis reflexis, ramis in extremo inermibus. *Gmel. sib.* 3. 60. *t.* 12. *fig.* 2.

Atraphaxis inermis foliis planis. *Hort. cliff.* 138.

Lapathum orientale, frutex humilis, flore pulchro. *Tournef. cor.* 38. *Amm. in comment. petropol.* 14. 400. *tab.* 13.

Lapathum dauricum montanum, fruticans, ramis latè sparsis. *Amm. ruth.* 227.

Frutex *pedalis ad sesquicubitalem, omninò de basi ramosus, ramis numerosis, virgatis, lævibus, pallidis, teretibus.* Folia *spathulato-lanceolata, pruinosa, in petiolum attenuata, mucronato-acuta, obsoletè nervosa, subuncialia, aliquotiès angustiora quàm lata, margine repanda v. obsoletè subdentata:* petioli *breves:* ochreæ *subulato-biacuminatæ.* Flores *roseo-pallentes, trini, aggregati, axillares,* fasciculi *in* racemum *longum foliosum remotiusculum digesti:* bracteæ *plures breves, pedicellorum bases cingentes, furfurosæ;* pedicelli *rubri, glabri, tenues, nudi, bis-ter-v. ultrà breviores foliis vix longiores corollâ, floriferi erectiusculi, fructiferi dependentes.* Cor. *erecta, 5-partita, basi extùs brevè turbinata:* lac. *disco et venis sanguineæ, ambitû albicantes;* 2 exteriores *duplo minores magìsve, deflexæ, ovato-rotundæ, profundè concavæ, medio dorsi virentes;* interiores 3 *subrotundæ, undulatæ, persistentes, solæ in capsulam triquetram rubicundiorem pro semine fovendo arctè conniventes.* Fil. 8, *disco corollæ inserta, subinæqualia, firma, lanceolato-subulata, glabra, basi carnosa atque sanguineo-rubra, longiora paulò breviora corollâ.* Anth. *parvæ, luteæ, subrotundo-didymæ, primò incumbentes, indè erectæ, introversæ.* Germ. *rubrum, ovali-prismaticum, lucidum, brevius filamentis:* stylus *subnullus sanguineus;* stigmata *lobi* 3, *crassi, subrotundi, pallidè rosei, pruinosi, uno versû inclinantes.* Sem. *nudum castaneum, formâ germinis, nitens, acutum, testâ crustaceo-coriaceâ.*

The present is a hardy shrub, and belongs to a species which forms one of a section of the genus that comprises

the common Buckwheat. It is a native of Siberia, and, if Tournefort's plant is really the same, of the Levant. Introduced by Monsieur Richard in 1770; but is not often met with in our collections, where it requires to be cultivated in the same soil and situation as RHODODENDRONS and AZALEAS. Some have asserted that this and ATRAPHAXIS *spinosa* are the same plant, and that one becomes the other; but it should appear by the two being still every where recorded separately, that this is an assertion which at least requires confirmation.

From a foot to a yard and half high, stem branching from the bottom upwards, branches numerous, virgate or rodlike, smooth, pale, round. *Leaves* spatulately lanceolate, frosted, tapered towards the petiole, pointed, faintly veined, about an inch long, several times longer than broad, repand at the edge or faintly indented: *petioles* short: *ochrea* or *stipular sheath* subulately two-pointed. *Flowers* pale rose-coloured, axillary by threes, the threes disposed in a long wideset leafy raceme: *bractes* several, chaffy, placed at the bases of the pedicles: *pedicles* smooth, red, slender, 2 or 3 times shorter than the leaves or more, scarcely longer than the corolla, while bearing the flower upright, dependent when they bear the fruit. *Corolla* upright, 5-parted, shortly turbinate at the base: *segments* crimson at the disk and veins, whitish at the circumference; *two outer ones* twice the smallest or more, deflectent, ovately orbicular, deeply concave, green in the disk of the back; *three inner ones* nearly round, undulated at the edge, persistent, finally closing together so as to form a kind of 3-cornered capsule for the keep of the seed. *Filaments* 8, inserted in the disk of the corolla, somewhat unequal, firm, lanceolately subulate, smooth, fleshy and deep crimson at the base, the longer ones but little shorter than the corolla: *anthers* small, yellow, roundly didymous, first incumbent, afterwards upright, facing inwards. *Germen* red, oval, prismatic, shining, shorter than the filaments: *style* scarcely any, crimson: *stigmas* 3 thick roundish pale rose-coloured frosted lobes, inclining one way. *Seed* naked, chestnut-coloured, of the same shape as the germen, shining, sharp-pointed, with a subcrustaceous leathery coat.

The drawing was taken in August last at the nursery of Messrs. Whitley, Brames, and Milne, Fulham.

CACTUS Dillenii.

The Eltham Indian-Fig.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. CACTI. *Jussieu gen.* 310. *Div. II.* Petala et stamina indefinita.

CACTUS. Suprà vol. 2. fol. 137.

Div. Opuntiæ, *compressæ articulis proliferis.*

C. *Dillenii,* erectus; articulis frugiferis obovato-subrotundis, glaucis, spinarum validarum flavicantium fasciculis divaricatis et penicillo setoso-piloso baseos pluriès longioribus; germine penicillis nonnullis vagis in summitate, breviore corollâ: stigmate sexlobo.

Tuna major, spinis validis flavicantibus flore sulphureo. *Dillen. elth.* 398. *t.* 296. *fig.* 382.

Frutex *pinguis, compressus, articulato-ramosus,* 4-6-*pedalis v. ultrà, erectus, glaucus.* Flores *pauci in margine superiore articulorum terminalium, sulphurei, concolores, diametro subquadriunciali.* Stylus *albus.*

The upper articulations of the stem of this plant differ from those in *Tuna,* by being nearly as broad as long, and of an oblately cuneate or rather oblately obovate form; the flower is of one colour, not red on the outside, as there, and considerably larger; the germen has setaceous pencils or small tufts only at the upper part of the germen, and not scattered over the whole. It flowered in the celebrated garden at Eltham before 1732, and was represented by Dillenius, in his Hortus Elthamensis, but the figure has not been applied by Linnæus to any species. We see no reason for supposing it a variety of *Tuna.* Calling a plant a variety may serve to shuffle off the task of expressing near distinctions, but when said without the proof of experience or analogy, and in the face of difference, should have little weight. It is indeed a safe assertion, for he who makes it can never be shown to be in the wrong; a danger to which the opposite assertion may be subject to the end of time. But then a species that stands reputed as the variety of another, is a whole race falsified on the records of science; and, as varieties are ever less anxiously attended to than species, a race exposed to the chance of being entirely overlooked.

The drawing was made from a plant in the collection of Mr. Vere, at Kensington Gore. It was about four feet high, and had never been known to flower before. We

believe it to be one that has been very seldom seen in bloom in this country, if ever, since the time of Dillenius. It is not figured in Monsieur Decandolle's work on Succulent Plants. The flower was entirely decayed before we could find an opportunity of inspecting it for description.

The following version of the character of CACTUS *Opuntia* (in which *Tuna,* and many other apparently distinct species, have been included as varieties of each other) from Monsieur Decandolle's work may serve as an outline of the more general characteristics of the species of the division of the genus to which our plant belongs.

Stem flattened, jointed, joints sometimes ovate, sometimes oval, sometimes oblong, obtuse, *lower ones* ash-coloured, somewhat woody, nearly cylindrical, and scarcely separated at the junctures, *upper ones* herbaceous, fleshy, beset with tubercles disposed in a quincuncial order; from every tubercle are produced short pencils of thick hair or bristles, and fascicles of long thorns, which are either setaceous or subulate, white or yellow, hard, sharp-pointed, and prove abortive in various proportions. *Leaves* issuing out at the tubercles below the thorns, one to each tubercle, shaped like those of the Stone-crop, caducous, small, round, pointed, green or slightly purpled. *Flowers* from the upper edge of the terminal joints, solitary or many together, large, yellow, sessile. *Calyx* growing on the crown of the germen, divided into many leaflets at the top: *leaflets* flat, ovately round, resembling the outer petals and scarcely distinct from them. *Petals* of the *corolla* longer than the calycine leaflets, standing upon the calyx or the margin of the germen, for we may express it which way we will, in several ranks, cuneate, obtuse, sometimes emarginate, the middle nerve terminating in a short mucro or dagger-point. *Stamens* numerous, inserted at the same point as the petals, in several rows. *Filaments* filiform, upright, long: *anthers* inserted at the base, oval, yellow, bilocular: *pollen* yellow. *Germen* inferior or connate with the calyx, turbinate, green on the outside, beset with pencilled thorny turbercles like the stem. *Style* white, upright, thicker above the base, tapered at the top, generally hollow, cylindrical: *stigmas* 8-9- (in the present species 6-)rayed, thick, viscous, obtuse. *Berry* (something like a fig, whence the English name of "Indian-fig") fleshy, ovoid, large, purple, one-celled, with an ovate polyspermous loculament: *seeds* numerous, small, affixed round about to the wall of the loculament, brown, reniform or kidney-shaped.

DIANTHUS crenatus.
Long-cupped Cape Pink.

DECANDRIA *DIGYNIA.*

Nat. ord. CARYOPHYLLEÆ. *Jussieu gen.* 299. *Div. V.* Cal. tubulosus. Stam. alterna hypogyna, alterna sæpiùs epipetala. Styli 2 aut 3 aut 5.

DIANTHUS. Cal. tubulosus 5-dentatus, basi squamis 4 aut pluribus cruciatìm imbricatis cinctus. *Pet.* 5 unguiculata, limbo sæpè dentato. Styli 2 sæpè recurvi. *Caps.* cylindrica 1-loc. apice dehiscens. *Flores terminales, aggregati aut solitarii pluresve distincti. Species quædam suffrutescentes.* Juss. l. c. 302.

Div. Flores solitarii plures in eodem caule.

D. *crenatus,* floribus solitariis, squamis calycinis senis lanceolatis, corollis crenatis. *Thunb. prod.* 81.

Dianthus crenatus. *Willd. sp. pl.* 2. 677.

Rhizoma *horizontale lignosum, punctis diversis caules exserens, teres.* Folia *inferiora quaternatìm subverticillata decussataque, erecto-patentia, infernè subimbricato-approximata, linearia, acuminata, angustissima, subtetragono-canaliculata, subbiuncialia, margine scabriusculo-pubescentia, mucronata, rigidiuscula*; caulina *brevia, subulata, opposita, subvaginoso-perfoliata, par* 1 *ad quodque genu.* Caules *subpedales, compresso-teretes, solitarii, graciles, erecti, longè articulati, articulo supremo æquali foliis supremis, ramulis simplicibus, unifloris, solitariis, in vaginâ brevi genuum hinc axillaribus.* Flores *erecti, biunciales, albicantes, rubore obsoletè suffusi, concolores, absque omni maculâ, vesperè odori.* Squamæ calycinæ *per paria senæ, striatæ, ovato-lanceolatæ, mucronato-cuspidatæ, 4plo v. circà breviores calyce, par imum angustius, sphacelatum, paulum remotius.* Cal. *sesquiuncialis, striatus, cylindricus, tubo pennæ corvinæ duplo v. triplo latior, dentibus lanceolatis, erectis, margine sphacelatis.* Pet. *glabra, 2-uncialia:* ungues *subexsuperantes calycem, cuneato-lineares, angusti, intùs lineâ carnosâ concolori elevatâ planiusculâ discum medium in longum transeunte:* laminæ *cuneato-obovatæ cum acumine brevi lato, laciniato-crenatæ, at brevè, incisurâ mediâ profundiore.* Anth. *exsertæ, oblongæ, ochroleucæ.* Germ. *breve stipitatum, 3-plo brevius calyce, oblongum, cylindricum, albidum:* styli *palpiformes, continuo-stigmatosi, exserti ad ultra medium limbi, intùs supernè canaliculati, pubescentes, apice inflexi v. etiam intorti, ochroleuci.*

The type of this genus, so familiar in Europe, has a footing by different species in all the quarters of the globe. In America, however, only three species have been observed, two of which are held to be the same with two that belong equally to Europe. At the Cape of Good Hope four indigenous species have been found; of these only *albens* had been introduced into our collections before the present,

which differs from that by having a calyx an inch and a half long instead of half an inch long, six calycine scales instead of four, petals that are more deeply and numerously indented, and all of one colour instead of being tinged with violet on both sides at the top. It was raised from seed lately imported by Messrs. Lee and Kennedy, of the Hammersmith nursery, where the drawing was made last November.

Rootstock woody, horizontal, round, sending up several flower-stems from different points. *Lower leaves* subverticillated by fours and decussated, uprightly spread, almost imbricant at the lower part, linear, acuminate, very narrow, channelled so as to have something of the appearance of being four-cornered, about two inches long, roughishly pubescent at the edges, stiffish, mucronate: *stem ones* short, subulate, opposite, and connected by a short perfoliate sheath, one pair at each joint. *Stems* solitary, about a foot high, round, compressed, slender, ascendent, with longish internodes, the upper one of which is about the length of the uppermost pair of leaves; *branches* solitary, one from an axil of each pair of the upper leaves, one-flowered. *Flowers* upright, two inches long, whitish with a very faint suffusion of red, self-coloured, smelling sweet in the evening. *Calycine scales* 6, in pairs, fluted, ovally lanceolate, with a long sharp subulate point, about 4 times shorter than the calyx, lower pair narrowest, sphacelate, and rather more distant than the two upper. *Calyx* twice or thrice the diameter of the tube of a crow-quill, cylindrical, fluted, an inch and half long, teeth lanceolate upright sphacelate at the edge. *Petals* smooth, 2 inches long: *ungues* rather higher than the calyx, cuneately linear, narrow, with a fleshy flattish linear ridge running down their middle on the inside: *laminæ* cuneately obovate with a broadly tapered point, shallowly and somewhat crenately jagged, the middle fissure deeper than the rest. *Anthers* above the calyx, oblong, cream-coloured. *Germen* standing on a shaft three times shorter than the calyx, oblong, cylindrical, whitish: *styles* something like the feelers *(palpi)* of an insect, continuous with the stigmas, which reach to near the top of the limb, and are channelled and pubescent on the inside, sometimes twisted spirally, cream-coloured.

a
b

DIGITALIS parviflora.

Small-flowered Fox-glove.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARIÆ. *Jussieu gen.* 117.
SCROPHULARINÆ. *Brown prod.* 433.
DIGITALIS. *Suprà vol.* 1.*fol.* 48.

D. *parviflora*, foliolis calycinis oblongis obtusis marginibus rachique lanatis, corollis obtusis: labio superiore integro; inferioris lobo medio intùs villoso lateralibus paulò majore, foliis omnibus integerrimis adultis margine lanatis. *Brown in Hort. Kew. ed.* 2. 4. 29.

Digitalis parviflora. *Jacq. hort. vindob.* 1. 6. *t.* 17. *Willd. sp. pl.* 3. 284.

Digitalis ferruginea; (γ); floribus sessilibus densè spicatis, calycibus margine tomentosis. *Lamarck encyc.* 2. 280.

Caulis *simplex, à decursû foliorum angulosus, villosus v. sublanatus, strictus, cavus.* Fol. *undique sparsa, erectiuscula, sessilia, lineari-lanceolata, lucida, nervosa nervis ascendentibus margineque lanatis, semipedalia latitudine* ¾ *partium unciæ.* Racemus *spicatus, sesquipedalis, erectus, infernè foliosus, cylindricus, undique sparsus, confertus, foliis floralibus à longioribus flore descrescentibus in* bracteas *eodem breviores.* Flores *horizontali-nutantes, longitudine* ⅓ *partis unciæ, diametro paulò majore pennæ corvinæ:* pedicelli *crassi, lanati, 3-plo breviores calyce.* Cal. *herbaceus, 3-plo ferè brevior corollâ, bilabiato-campanulatus, segmentis oblongis, obtusis, lanato-ciliatis, cæterum glabris, summo medio plurimùm minore, 2 imis paulò amplioribus 2 supernis proximis.* Cor. *ferruginea, obsoletè infundibuliformis, extùs glanduloso-villosa,* tubo *curvato compresso subæquante* faucem *parùm extumescentem,* limbi laciniis *obtusis:* labium superius *breve subintegrum v. omninò bifidum lobis subæquantibus* 2 *laterales* labii inferioris, *lobo imo latiore duploque longiore rotundato lanoso-ciliato intùs venis fuscis reticulato.* Stam. *longiora subæqualia corollæ, 2 breviora fauce inclusa;* fil. *adnata tubo, glanduloso-pilosa, infrà purpurascentia;* anth. *luteæ, verticali-bilobæ, incumbentes, subgnomonico-flexæ.* Germ. *ovato-oblongum, subtrigonum, æquale calyci, pilis minutis capitatis pubescens:* stylus *basi purpurascens, indè subflavescens, curvulus, longitudine ferè germinis:* stig. *punctum acutum tandem transversè hiulcum.* Caps. *ovato-pyramidata, stylo persistente mucronata.*

The species with the smallest flowers of any of the Fox-gloves that are known to us. It was first observed by the venerable Jacquin, in the Botanic garden at Vienna, but whence it came there, or where indigenous, has not been yet discovered. It is a tolerably hardy perennial plant, which grows in any sheltered part of the garden, and was introduced by Sir Joseph Banks in 1798.

Stem simple, angularly fluted by the decurrent bases of

the foliage, villous or rather woolly, upright, hollow. *Leaves* scattered all round, nearly upright, sessile, linearly lanceolate, shining, nerved, nerves ascendent and as well as the edge of the leaf woolly, half a foot long or more, about $\frac{3}{4}$ of an inch broad. *Raceme* spiked, a foot and half long, upright, leafy downwards, cylindrical, closely strown, the floral leaves diminishing from longer than the flowers to *bractes* shorter than these. *Flowers* horizontally nodding, about a third of an inch long, not much wider than the tube of a crow-quill: *pedicles* thick, woolly, three times shorter than the calyx. *Calyx* herbaceous, almost three times shorter than the corolla, bilabiately campanulate; *segments* oblong, obtuse, woolly at the edge, as to the rest smooth, the middle upper one a good deal the smallest, the two lowermost but little larger than the two upper side ones. *Corolla* rust-coloured, faintly funnelformed, on the outside glandularly villous, *tube* curved, compressed, about equal to the slightly widened *faux* or *throat*, *segments* of the *limb* obtuse: *upper lip* short, either nearly entire or completely bifid, with lobes about equal to the two sides of the *lower lip*, the lowermost lobe of all broader than the rest and twice as long, rounded, with a woolly edging, marked on the inside by brown netted veins. Longer *stamens* about even with the corolla, two shorter ones confined within the throat; *filaments* grown to the tube, beset with glandular hairs, purplish below; *anthers* yellow, vertically two-lobed, incumbent or balancing, bent bicrurally. *Germen* ovately oblong, somewhat trigonal, even with the calyx, beset with short headed hairs: *style* purplish at the base, yellowish beyond, somewhat bent, nearly of the length of the germen: *stigma* a sharpened point sometimes splitting transversely. *Capsule* ovately pyramidal, pointed by the persistent style.

The drawing of this plant was taken at Mr. Knight's nursery, King's Road, Chelsea, in September.

SPARAXIS grandiflora; γ. *Liliago.*
Redouté's Sparaxis.

TRIANDRIA *MONOGYNIA.*

Nat. ord. Ensatæ. *Lin. Ord. nat. VI. Nobis in ann. bot.* 1. 219.
Irides. *Jussieu gen.* 57. Irideæ. *Brown prod.* 302.

SPARAXIS. *Infl.* spicata, disticha, alterna, seorsìm bivalvi-spathacea, valvis amplis diaphano-membranosis aristato-laceris. *Cor.* supera, infundibuliformis, 6-fida: *tubus* brevis angustus abiuns in faucem turbinatam: *limbus* 6-partitus, amplus, subæqualis, connivens v. stellatus, rariùs bilabiatus et inæqualis. *Stam.* tubo imposita, inclusa, inclinata, nunc ascendentia, rarò erecto-fasciculata: *anth.* lineares, à dorso appensæ. *Stylus* gracilis, inclusus, directione staminum: *stig.* 3, linearia, complicato-canaliculata trifariàm replicata. *Caps.* membranosa, oblonga, rotundatè 3-gona, 3-loc., 3-valv. valvis medio septigeris: *sem.* biseriata, numerosa, globosa v. pressione deformata, magnitudine ferè Sinapeos.

Bulbo-tuber *ovatum integumentis membranoso-fibrosis multiplicibus vestitum, nunc unum super alterum moniliformi-catenatum.* Fol. *ensata, collaterali-disticha, caulina axillis sæpè bulbifera.* Caulis *simplex* v. *paniculato-ramosissimus, 3-uncialis ad orgyalem.* Flos *solitarius ad eosdem numerosos.*

S. *grandiflora,* regularis; tubo æquali spathæ, limbo tubo unà cum fauce triplo longiore, laciniis cuneato-oblongis: staminibus uno versû inclinatis subparallelo-divergentibus lenissimè assurgentibus.

Sparaxis grandiflora. *Nobis in ann. bot.* 1. 225, *& Curtis's magaz.* 779. *Hort. Kew. ed.* 2. 1. 85.

Ixia grandiflora. *De la Roche pl. nov. n.* 11. *Houtt. nat. hist.* 17. *t.* 77. *fig.* 3. *Salisb. prod.* 37. 26. *Nobis in Curtis's magaz.* 541. *Redouté liliac.* 139 *&* 362.

Ixia Liliago. *Redouté liliac.* 109.

Ixia aristata. *Hort. Kew.* 1. 57. *Willd. sp. pl.* 1. 203. *Vahl enum.* 2. 71. *n.* 46. *Andrews's reposit.* 87; *(non verò Thunbergii pro quâ à plerisque malè habebatur).*

Ixia bulbifera; β. *holosericea. Vahl enum.* 2. 72; *(tantummodò quoad hancce solam varietatem.)*

Ixia bulbifera; (α.) *flore purpureo. Thunb. Ix.* 16. 17.

Ixia holosericea. *Jacq. hort. schœnb.* 1. *tab.* 17.

Ixia uniflora. *Lin. mant.* 27. *et Herb. Lin. Jacq. coll.* 4. 181. *ic. rar.* 2. *t.* 283.

Ixia fimbriata. *Lamarck encyc.* 3. 339. *illustr.* 1. 411.

Ixia foliis gladiatis glabris, caule unifloro. *Mill. ic.* 158. *t.* 237. *f.* 3.

Sisyrinchium æthiopicum majus. *Commel. hort.* 1. 83. *tab.* 42.

(α) flore intùs saturatè purpureo.
(β) flore intùs flavescente, basi limbi maculis purpureis 6 subrotundis.
(γ) flore intùs albicante radiis senis purpureis.
Antheris *ochroleucis.* Stigmatibus *semuncialibus.* Spathæ *albo-diaphanæ.*

Sparaxis is distinguishable at first sight among its coordinate genera by the sub-transparent membranous lace-

rated spathes of the inflorescence, besides the accordance of habit. This may seem an unimportant feature, but marks like this are not to be slighted in the composition of generic groups, especially in a tribe of plants of such simple configuration as that of the *Ensatæ*, where they are found to determine in the general habit of the species changes as real as are consequent upon the apparently more important ones in tribes where the plants are of greater complexity of configuration. The value of a mark is to be estimated on the one hand by the degree of general likeness consequent upon its presence throughout the species of a group, and on the other by the degree of general difference consequent on its absence in the species of the confining ones. In the *Ensatæ* very strange and conspicuous disparities in the proportions and inflections of the corolla and floral organs, are frequently found to be followed by no difference in the general habit of the species greater in degree than that which must always exist even between the nearest members of a genus. While a very obscure and inconspicuous mark of some other kind is often found to determine peculiarities in the general habit of a greater or less portion of species; and which peculiarities are also seen to disappear by phases that answer to and keep pace with others, through which the disappearance of this mark takes place at the confines of the group.

Grandiflora is native of the Cape of Good Hope, and was cultivated at the Chelsea Garden by Miller, in 1758. The drawing was taken this spring in the same garden.

Bulb-tuber about the size of a Filbert, with pale fibromembranous integuments. *Leaves* 5-8, collaterally distich, ensiform, equitant, finely striated, shorter than the stem, generally bulbiferous in the axils. *Flowers* 1-5 or more, distantly spiked, upright, two inches in depth, particoloured, sometimes almost entirely of deep violet purple, at others white or yellow and variously marked with purple, without scent. *Spathe* whitish, subdiaphanous, equal to the tube. *Corolla* regular, funnelform, outspread, limb about 4 times as long as the faux and tube taken together, stellately expanded, segments cuneately oblong. *Stamens* twice shorter than the limb, inclining one way and divergent: *anthers* long, linear, cream-coloured. *Stigmas* spreading, white, half an inch long, linear, foldingly channelled and pubescent on the inner side.

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TRAPA natans.
European Water-caltrops.

TETRANDRIA *MONOGYNIA.*

Nat. ord. Hydrocharides. *Jussieu gen.* 67.
Onagrariæ. *Lamarck et Decand. fl. franç.* 4. 413.
TRAPA. *Vid. Append. hujus vol. in loco.*

T. *natans*, nucibus quadricornibus, spinis patentibus. *Lin. suppl.* 128.
Trapa natans. *Linn. sp. pl.* 1. 175. *Gærtn. sem.* 1. 127. *t.* 26. *f.* 5. *Allion. pedem. n.* 872. *Krock. siles. n.* 246. *Hort. Kew.* 1. 164. *ed.* 2. 1. 267. *Lamarck encyc.* 3. 669. *illustr. t.* 75. *Villars dauph.* 2. 340. *Lam. et Decand. fl. franç.* 4. 418. *Schkuhr handb.* 1. 85. *t.* 25. *Willd. sp. pl.* 1. 681; (*excl. Rheede mal.*) *Prod. flor. græc.* 1. 104.
Trapa foliis natantibus, petiolis ventricosis. *Hall. helv. n.* 527.
Tribulus aquaticus. *Cam. epit.* 715. *Bauh. pin.* 194. *Ger. emac.* 84.

Rhizoma *natans, nodis promens radices compositas è radiculis numerosis setaceo-capillaribus in axem communem pyramidatim connatis;* caudex *confertè foliosus,* foliis *super aquam in stellam multiradiatam dispansis, longè petiolatis,* laminâ *rhombeâ supernè subrotundâ dentatâ dentibus bimucronatis, diametro sesquiunciali, vividè virentia, infrà pubescente;* petiolis 3-*plo longioribus laminâ, hirsutiusculis, adultis supernè extumescentibus in utrem oblongum medullâ cellulosâ repletum cujus ope natat planta.* Flores *plurimi, parvi, submersi;* pedunculi *breviores petiolis, subhirsuti, patentes, ascendentes, fructiferi plurimùm longiores crassioresque floriferis.* Cal. *semisuperus, viridis, rigidus,* foliolis *ovato-acuminatis,* ("*primùm conniventibus deindè patulis, 2 paulò inferioribus.* Pet. *alba, pellucida, venosa, inciso-emarginata, æqualia, brevissimis unguibus purpureis infra nectarium nata.* Nect. *membrana in stellæ modum plicata persistens angulis octo, primùm subluteum, deindè album, posteà viride.* Fil. *alba, plana:* anth. *didymæ, magnæ.* Stylus *basi viridis:* stig. *cavum rotundum rubrum perforatum. Florescentia intra calycem conniventem clausum absolvitur.*" All. l. c.)

A remarkable annual water-plant, belonging to a genus, which although abundantly and very generally dispersed over Europe to the south of this country, is so by the means of one species only. This has been naturalized in ponds near Paris, yet here, where it is said to have been introduced by Dr. Solander in 1781, every attempt to bring it to seed in the open air has failed. The specimen was sent us by Mr. Lambert, who ripened the seed, by raising the plant in water in his hothouse at Boyton.

In its native region it affects rivers with muddy bottoms, ponds, lakes, and ditches round towns. The genus has

been named from a fancied likeness of the radiately thorned fruit, to the instrument called Caltrops, formerly used as a defence against cavalry. TRAPA is a Linnean elision of *Calcitrapa*, which last means the same as Caltrops; so does *Tribulus*, the classic appellation of the plant. The fruit or nut is of a turbinate shape, one-seeded, ripens under water, resembles in its nature the Chestnut, and is eaten like that at the dessert, either roasted or boiled. The outermost covering, a somewhat fleshy opaque membrane, is readily stripped off, when the fruit, generally about an inch in diameter, shows itself with the same sort of shining brown coriaceous *testa* or *kernel-coat*, which belongs to the Chestnut. The kernel is sometimes made into flour, which serves for porridge, and even for bread in several European countries, especially Carinthia. At Venice the fruit is sold by the name of the Jesuit's Nuts. The Germans call it the Water-nut. The French *Macre*. Children eat it raw. The Chinese are said to cultivate another species *(bicornis)* in their undrained water-lands, as a substitute for bread-corn.

Rootstock of various lengths according to the depth of the water, furnished at the joints with distinct tufts of roots; each tuft consisting of an axis, surrounded by numerous horizontal capillary radicles, gradually shortening from bottom to top, and forming a pyramidal plume. These have been generally looked upon as the water-leaves, but we do not see why. *Caudex* continuous, surrounded by a close alternately disposed pedicled foliage, displaying a bright green star at the surface of the water; *leaves* about an inch and half broad, rhomboidal, thickish and nerved, bimucronately toothed, subpubescent at the nerves underneath: *petiole* 2-3 times longer, distending just below the blade into an oblong intumescence, something like a small angler's float, filled with cellular pith, and acting as a buoy. *Flowers* small, white, submerged, pellucid: *peduncles* solitary, 1-flowered, axillary, enlarging as the fruit grows. Allioni ascribes to the flower a membranous persistent *nectary*, plaited in the form of a star, which no one else seems to have observed. The anthers part with the pollen under water before the calyx opens. The thorns on the fruit are formed by the extension and induration of the 4 segments of the calyx. The kernel-coat never opens spontaneously, and the seed germinates through a small aperture at the top previously closed by a thin membrane and converging villi.

MESEMBRYANTHEMUM tigrinum.
Tiger-chap Fig-Marygold.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. Ficoideæ. *Jussieu gen.* 315. *Div. II.* Germen inferum.

MESEMBRYANTHEMUM. Cal. superus 5-fidus persistens. *Pet.* numerosa serie multiplici, linearia basi levitèr connata. *Styli* 5, rariùs 4 aut 10. *Caps.* carnosa umbilicata umbilico radiis notato, multilocularis loculis numero stylorum. *Suffrutices aut herbæ; folia opposita aut rariùs alterna, incrassata, formâ plurimùm varia; flores solitarii, axillares aut extrà axillares aut sæpiùs terminales; fructus interdùm ficiformis.* Juss. l. c. 317.

Div. II. Subacaulia, caulibus nullis vel brevissimis, radice perenni. Hort. Kew. ed. 2. 3. 213.

M. *tigrinum* acaule, foliis glaucescentibus albo-maculatis rariùs tuberculatis: marginibus profundè ciliatis. *Haworth misc. nat.* 31.

Mesembryanthemum tigrinum. *Haworth mesemb.* 164. *Ejusd. succ.* 216. *Willd. sp. pl.* 2. 1029. *Thompson's bot. displ.* 9. *Hort. Kew. ed.* 2. 3. 218.

Plantula *acaulis, pinguissima, perennis.* Folia *radicalia, suboctona?, decussato-congesta, patentia, cymbiformi-ovata, glauca, pruinosa, maculis parvis albis irregularibus picta, subuncialia, latitudine* $\frac{2}{3}$ *unciæ, crassitudine ferè* $\frac{1}{3}$ *unciæ, subtùs convexa, supernè versus proræ cymbuli ad instar attenuata, suprà plana, summis lateribus externè sub dentibus à sulcis vel canaliculis obsoletioribus transversè rugata, interno margine dentato-ciliata dentibus albis cartilagineis setaceo-aristatis, aristis tenuitate ferè fili serici ad lentem villosis, uno versû introrsùm inclinantibus.* Flos *centralis, sessilis, magnus, luteus, croceo-emarcescens, non nisi post meridiem expandens.*

Of the 211 species of this genus enumerated by Mr. Haworth, all are indigenous of the Cape of Good Hope, except about five or six. Only one species has a station in Europe, and that at an extreme part, viz. the shores of Naples. Two or three belong to the Levant, one of which is the well-known Ice-Plant, found near Athens. Not a single American species has been observed. The name of Fig-Marygold, by which these plants are known in our gardens, has been suggested by a twofold resemblance, on one hand by that of the fruit to the form of a fig, and on the other by that of the flower to the common Marygold, like which it shuts itself up in cloudy weather. The genus forms the principal group in the gardener's tribe of succulent plants.

The present diminutive species was introduced in 1790

from the Cape of Good Hope, and is one of those whose flowers do not expand till after midday.

A perennial stemless plant. *Leaves* fleshy and very thick, radical, about 8, closely decussated, spreading, ovate, cymbiform or shaped like a boat, glaucous, elegantly marked with small white irregular spots, in our specimen about an inch long, two thirds of one broad and about one third of one thick, convex underneath, narrowing towards the end like the head of a boat, flat above, high up the sides faintly and transversely grooved below the base of the teeth, beset at the inside of the edge with a single row of white cartilaginous long-awned slender teeth, inclining towards the base of the leaf; the awns, nearly as fine as the thread of a silkworm, are villous when viewed through a magnifying glass. *Flower* central, sessile, large in proportion to the plant, yellow, becoming saffron-coloured as it goes off.

All these plants belong to the dry stove; and their treatment is too familiar to every one to require notice in this place.

The drawing was made in September, at the nursery of Messrs. Whitley and Co. Fulham.

GLYCINE bituminosa.

Clammy Glycine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Cor. irregularis papilionacea. Legumen uniloculare bivalve. *Frutices aut herbæ; folia simplicia aut ternata aut rariùs digitata; stipulæ nunc subnullæ, nunc conspicuæ imo petiolo adnatæ aut ab eodem distinctæ.*

GLYCINE. *Cal.* bilabiatus. *Corollæ* carina apice vexillum reflectens. *Willd. sp. pl.* 1058.

G. *bituminosa*, foliis ternatis, floribus racemosis, leguminibus tumidis villosis. *Linn. sp. pl.* 2. 1024.

Glycine bituminosa. *Thunb. prod.* 131. *Willd. sp. pl.* 3. 1064. *Hort. Kew.* 3. 34. *ed.* 2. 4. 298.

Phaseolus africanus hirsutus bituminosus, siliquis bullatis, flore flavo. *Herm. lugdb.* 492. *t.* 493; *(fig. naturali valdè minor).*

Frutex *volubilis, viscoso-hirsutus pilis basi bulbosis, orgyalis v. ultra,* ramis *anguloso-striatis, tandèm fuscescentibus v. fulvescentibus, distantèr foliosis.* Folia *ternata, hirsuta, v. modò ex lapsorum pilorum relictis bulbis glanduloso-bullulata, vetustiora fusco-virentia;* foliola *ovata, infra unciam longa, acuta, 3-nervia, subrugosa, medium subrhomboidale v. obsoletè 3-lobum, aliq 2 inæquilatera lobo interiore obliterato, brevissimè petiolata:* pet. communis *longior v. subbrevior foliolis, inarticulatus, striato-angulosus:* stipulæ *ovato-lanceolatæ.* Racemi *axillares, solitarii, erecti, laxiùs pluriflori, longiores foliis, pubescentes.* Flores *lutei, ¾ unciæ longi, elliptico-oblongi, obtusissimi,* pedicellis *brevioribus calyce, ebracteatis.* Cal. *hirsutus, citra medium fissus, viridis, fusco-notatus; tubo compresso; segmentis lineari-subulatis, intermedio imorum majore.* Vex. *ascendens, elliptico-obcordatum, parùm longius carinâ, dorso violaceo-venosum, plicâ mediâ carinatum, lateribus deflexis; laminâ basi posticè bidentatâ; ungue cuneato æquali tubo calycino:* alæ *flavæ concolores, plurimùm minores carinâ, oblongæ, ex apicibus suis suprà dorsum carinæ contingentes:* car. *lato-falcata, recurvo-ascendens, obtusa, compressa, pallidè lutescens apice atro-violacea, petalis 2 imo margine cohærentibus summo apertis, fissuræ labris saturatè flavis.* Fil. *diadelpha, 9 suprà brevitèr distincta, angulo acuto assurgentia:* anth. *ovatæ, breves, fulvæ;* pollèn *è sphærulis lævissimis grumoso-granulatùm, non pulvereùm.* Germ. *sericeo-hirsutum, 4-plo brevius stylo v. magis:* stylus *virens, infernè villosus, supernè assurgens:* stig. *capitatum, glandulosum, papillosum.* Legum. *hirsutum, inflatum, oblongum, subbiunciale,* seminibus *pluribus. Bulbilli pilorum diaphani.*

Native of the Cape of Good Hope; introduced by Mr. Masson in 1774; but had been long previously cultivated in Holland. Hermann found it growing at the side of the Table Mountain to the height of three yards. It requires to be kept in the greenhouse; flowers from April to September, and seeds freely.

A twining shrub, furred over by a roughish viscous nap, the hairs of which stand upon minute transparent globular bulbs, often seen to remain where the hair that surmounted them has fallen away, giving to the leaf or other part where this happens, the appearance of being glandularly fretted instead of furred; *branches* angularly fluted, distantly leaved older ones becoming tawny or dusky. *Leaves* ternate, furred, according to Hermann with a bituminous smell, older ones dusky green, *leaflets* ovate, less than an inch long, pointed, 3-nerved, slightly wrinkled, the middle one subrhomboidal or faintly 3-lobed, lateral ones unequally sided, the inner side narrowest, very shortly petioled: *common petiole* sometimes longer, sometimes rather shorter than the leaflets, not jointed, flutedly angular: *stipules* ovately lanceolate. *Racemes* axillary, solitary, upright, with several widishly set flowers, longer than the leaves, pubescent. *Flowers* yellow, two thirds of an inch long, elliptically oblong, round-pointed; *pedicles* shorter than the calyx, bracteless. *Calyx* shaggily furred, cleft to below the middle, green, stained with brown; *tube* compressed; *segments* linearly subulate, the middle of the three lower ones largest. *Vexillum* or *standard* ascendent, elliptically-obcordate, very little longer than the keel, marked at the back with purple veins and keeled, deflectent at the sides; blade with two teeth at the bottom of the back; unguis cuneate, equal to the tube of the calyx: *alæ* or *wings* deep yellow, of one colour, much smaller than the keel, oblong, touching by their tops over the back of the keel: *carina* or *keel* broadly falcate, recurved ascendent, obtuse, compressed, pale yellow or sulphur-coloured, tinged at the top with dark violet-purple, its two petals cohering at the lower margins, open at the upper, where the fissure is bordered with deep yellow. *Filaments* diadelphous, shortly separated above, bending upwards with an acute angle: *anthers* ovate, short, tawny; *pollen* of small polished globules, grumously granular, not pulverulent. *Germen* furred, with a longish silky close pressed pubescence, 4 times shorter than the style or more: *style* green, villous downwards, bent upwards at the other end: *stigma* capitate or headed, glandular, papulous. *Pod* shaggily furred, inflated or distended as if blown out, about two inches long; *seeds* several.

The drawing was taken at the nursery of Messrs. Whitley and Co. Fulham.

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a Calyx.

ACROSTICHUM alcicorne.

Elk's horn Acrostichum.

CRYPTOGAMIA *FILICES.*

Nat. ord. FILICES. *Jussieu gen.* 14. *Brown prod.* 145. *Div. I.* GYRATÆ. (Polypodiaceæ.) *Capsulæ uniloculares, annulo articulato, elastico, longitudinali (plerùmque incompleto) instructæ; transversim irregularitèr rumpentes.* Brown loc. cit.

ACROSTICHUM. *Sori* amorphi, seu *Capsulæ* per totam paginam inferiorem frondis (interdùm diversæ) l. ad ejus partem sparsæ, *Involucrum* nullum (nisi squamulæ v. setæ in quibusdam capsulis interstinctæ). *Brown l. c.*

A. *alcicorne,* frondibus dichotomis nervosis apicem versùs fructificantibus: sterilibus circumdantibus subrotundis lobatis indivisisve basi suberoso-incrassatis. *Brown prod.* 145.

Acrostichum alcicorne. *Swartz gen. & spec. fil.* 12. *Ejusd. syn. fil.* 196. *Willd. sp. pl.* 5. 111. *Hort. Kew. ed.* 2. 5. 500.

Acrostichum Stemmaria. *Beauvois fl. d'Oware & Benin.* 2. *tab.* 2.

Acrostichum bifurcatum. *Cav. præl.* 1801. *n.* 587.

Neuroplatyceros æthiopicus nervosis foliis cornu cervinum referentibus. *Pluk. amalth. t.* 429. *f.* 2. *Schkurh crypt.* 1. *t.* 2.

Filix *structuræ singularis.* Frondes primordiales *steriles, sessiles, planiusculæ, horizontales, spithameæ et ultrà, sæpè reniformes, margine rotundato s. interdùm variè lobato, glaberrimæ centro subfungoso pulvinato, molliusculæ, versùs margines membranaceæ, reticulato-venosæ.* Radices *et* radiculæ *subtùs congestæ, longæ, tomentoso-ferrugineæ.* Frondes fructificantes *è centro priorum substipitatæ s. versùs radicem valdè attenuatæ, sensim dilatatæ palmatæque, planæ erectæ interdùm 2 pedales, dichotomæ laciniis inæqualibus digitiformibus obtusis, nervosæ nervis dichotomis elevatis propè basin in stipitem crassum teretem concurrentibus: suprà glabræ virides, subtùs incano-tomentosæ, subindè glabræ.* Juniores *omninò lanato-molles, tomento ex villis stellatis congestis.* Fructificationes *versùs apices frondium dorsum laciniarum ad partem v. totum tegentes.* Capsulæ *minutissimæ, ferrugineo-rufæ, annulis nitentibus, in lineis confertissimis quasi congestæ. Cum* ACROSTICHO biformi, *quod* OSMUNDA coronaria *Mulleri, in quibusdam convenit; attamen et ab illo et ab omnibus aliis hucùsque notis certè diversum erit.* Swartz Syn. fil. 196.

The doctrine of Linnæus did not admit of the existence of any species of vegetable destitute of either stamen or pistil; upon the presence of these he founded his so justly celebrated system, an unrivalled effort of ingenuity in this department of natural history, and the key without which few would have passed the threshold of that of higher pretensions. As however in a very large proportion of the vegetable creation, these floral organs, if really present, are so in a form too clandestine to have yet allowed of demonstra-

tion, he was reduced to assume their existence under one shape or other, by analogy drawn from the portion of vegetation where their presence was incontrovertible; these he has concentred in one great class, designated by the title of *Cryptogamia*, divided into natural orders or such as are characterized from general structure. It is since his time that the term *phænogamous* has been devised, and only very lately that it has come into familiar use to express that portion of vegetation where the floral organs are plain and obvious, as opposed to the *cryptogamous* portion, where these are not so. Of still fresher date is the term *agamous*, suggested by the latest investigations, as applicable to a group that has hitherto ranked in *Cryptogamia*, in whose species not only no traces of stamen and pistil are detected, but in regard to which the presumption appears to be stronger (at least in the opinion of those who have proposed the distinction) that there are none belonging to them; of this nature are Mushrooms, Liverworts, &c. &c.

The subject of this article holds its place in the cryptogamous division, and in the order *Filices* (or Fern-tribe), comprising the largest vegetables of this nature that exist, some of them in the tropical regions being trees of 24 feet high, rivaling the Palms in stateliness of port. It comes under the section *Gyratæ* (including those species whose nascent frond is rolled something in the way of a crosier or a sheep crook), and the subdivision *Polypodiaceæ*, characterized by one-celled capsules, girded by a jointed elastic longitudinal and usually incomplete ring or hoop, which opens by bursting transversely. Its generic station is in Acrostichum, distinguished by *sori* (patches or groups of capsules) of which the contour is of no determinate shape, or in other words by capsules that beset a part or the whole of the under side of the fronds, which last are sometimes of two kinds; and by not being furnished with any sort of involucre (except where, as is sometimes the case, small scales or bristles mingle themselves among the capsules). The species is native of the coast of Guinea, Java, and New Holland; at least botanists have not yet distinguished between the plants peculiar to either of those mutually distant countries. The drawing was made from the New Holland plant, introduced by Mr. Caley in 1808, with which we were kindly furnished by Mr. Aiton, by whom it is considered as belonging to the greenhouse. In its native re-

gions it grows on trees of certain kinds and rocks. Mr. Brown found it constantly on the former on the southern coast of New Holland, and as constantly on the latter at the northern coast of that country. The following is the version of the excellent description which has been given of the species by Dr. Swartz.

A Fern of singular structure. *Lower* or *primordiate fronds* barren, nearly flat, horizontal, a span or more in breadth, frequently reniform or kidney-shaped, rounded or variously lobed at the edge, quite smooth, pulvinate or padded in the centre, softish, membranously attenuated towards the edges, nettedly veined. *Roots* and *radicles* crowded together in a tuft underneath, long, of a rusty colour and covered with a cottony nap. *Fertile or fruitbearing fronds* rising from the centre of the others somewhat stalked and very much tapered towards the root, gradually widened and palmate or handshaped, flat, upright, sometimes two feet high, dichotomous or divided into pairs of unequal fingershaped obtuse segments; nerved, the nerves dichotomous prominent conjoining near the base in a round thick stipe or stem peculiar to the plants of this order: smooth on the upper side and green, on the under cottony and grey, though sometimes smooth. *Young ones* tender and entirely covered with a cottony nap, the nap consisting of close stellately compounded villi. The mass of *fructifications* or *inflorescence* and *seed* is situated towards the top of the fronds, and covers either a part or the whole of the backs of the lobes or segments. *Capsules* extremely minute, of a rusty or cinnamon-coloured brown with shining rings or hoops, and crowded together in close lines or files.

We saw very fine plants of this extraordinary species in the hothouse at the nursery of Messrs. Lee and Kennedy, at Hammersmith, on which the barren frond was nearly five inches in diameter, and grew flat upon the surface of the mould to which it was fixed by the fibrous radication from the under surface, and appeared much of the same nature as the broad flat brown fronds we see in some of our own *Lichens* or *Liverworts*. It was of a pale yellow green, very unlike that of the fertile fronds, entirely smooth, repand and shallowly lobed at the circumference. The fertile fronds in these specimens were not fructescent. Perhaps it is the nature of the barren ones to decay before these become fruitbearers?

The upright figure in plate (262) shows the upper portion of the fertile fructescent frond frontwise, of the natural size; the crossed figure the back of the same, covered by *sori* or groups of fructifications. The figure in plate (263) shows the whole plant in the state it was when the drawing was made, diminished. On one side are a young barren frond and a young fertile frond; both covered with a whitish woolly pubescence.

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rochensis. *nobis in Curt. magaz. tab.* 1503.
longiflora. *nobis in Curt. magaz.* 1275, *vers. fol.* (α) Ixia longiflora. *loc. cit. tab.* 256. (β. γ.) *tab.* 1502.
pallida. *nob. in Curt. mag.* 1275, *vers. fol.* Ixia longiflora (*a*) *Willd. sp. pl.* 1. 203. Gladiolus. *Jacq. ic. rar.* 2. *tab.* 262.
capensis. *nob. in Curt. mag. tab.* 618. (β.) *tab.* 1531.
viridis. *nob. in Curt. mag. tab.* 1275.
crispa. *nob. loc. cit. tab.* 678.
pectinata. *nob. loc. cit.* 1275, *vers. fol.* Ixia. *Vahl enum.* 2. 62.
striata. *nob. loc. cit.* Gladiolus. *Jacq. ic. rar.* 2. *tab.* 260.
lineata. *nob. loc. cit.* Gladiolus. *Curt. loc. cit. tab.* 487.
securigera. *nob. loc. cit.* Gladiolus. *Curt. loc. cit. tab.* 313.
flava. *nob. loc. cit.* Gladiolus. *Vahl enum.* 2. 110.
refracta. *nob. loc. cit. et hìc suprà tab.* 135.
squalida. *nob. in Curt. magaz. tab.* 581.
fenestrata. *nob. loc. cit. tab.* 704.
crocata. *nob. in Curt. mag.* 1275, *vers. fol.* Ixia. *Curt. loc. cit. tab.* 184.
purpurea. *nob. loc. cit.* Ixia. *Vahl enum.* 2. 76. *Anne præcedente distincta?*
deusta. *nob. loc. cit. tab.* 622.
miniata. *nob. loc. cit. tab.* 609.

SPARAXIDIS *species. Vol.* 3. *fol.* 258.

pendula. *nob. in Curt. magaz.* 1482, *vers. fol. in notâ.* Ixia. *Willd. sp. pl.* 1. 204.
anemoniflora. *nob. in loc. cit.* 779, *vers. fol.* Ixia. *Jacq. ic. rar.* 2. *tab.* 273; *non Redoutæi.*
fragrans. *nob. loc. cit.* Ixia. *Jacq. loc. cit. tab.* 274.
tricolor. *nob. loc. cit.* Ixia. *Curt. in loc. cit. tab.* 381. (β. γ. δ.) Sparaxis. *nob. loc. cit. tab.* 1482.
galeata, *nob. loc. cit.* Gladiolus. *Jacq. ic. rar.* 2. *tab.* 258.
bicolor. *nob. loc. cit.* Ixia. *nob. loc. cit. tab.* 548.
grandiflora. *nob. loc. cit. tab.* 779, *et suprà fol.* 258.
bulbifera. *nob. loc. cit.* Ixia. *nob. loc. cit. tab.* 545.
fimbriata. *nob. loc. cit.* Ixia. *Lamarck encyc.* 3. 337.
lacera. *nob. in Annals of Botany.* 1. 227; *de specimine in Herb. Banks. assumta.*

Obs. We are far from confident that the two last species are really distinct from *grandiflora* and *bulbifera.* We have some doubts whether the Gladiolus *Xanthospilus* of Redouté (liliac. 124) belongs to Tritonia or to Sparaxis. The living plant could alone decide the point, and we have never met with that. We are at present inclined to deem it rather a Tritonia than a Sparaxis, in which last we had placed it in a Review of Redouté's work in the Journal of Sciences and the Arts. In the living plant the difference of habit in the two genera is at once perceived, and though real, requires intelligence as well as hand to express it by the pencil.

Stevia *Eupatoria. Vol.* 2. *fol.* 93.

The following synonym belongs to this species.

Stevia purpurea. *Jacq. fragm.* 80. *tab.* 172. *fig.* 2.

Lebeckia *contaminata. Vol.* 2. *fol.* 104.

The pre-eminence of the Banksian Herbarium has not been established so much by its extent or the number of celebrated ones incorporated with it, as through the matchless skill and talents of those who have super-

intended the determination of the specimens, and assisted in collating the whole with the Herbarium of Linnæus. To which we may add the having been passed in review by most of the eminent botanists of the day, by whom it has been resorted to from all parts, as the touchstone for the essay of the synonymy of their intended works, and who have attested their presence by various suggestions and corrections on its leaves. Among the unobserved errors in it, however, the considering the plant of the above article as the LEBECKIA *contaminata* of Thunberg and SPARTIUM *contaminatum* of Linnæus, is certainly one; and we were misled by it, though not without the fault of remissness in ourselves. The Linnean species has yellow flowers and monadelphous stamens, that is, the tenth stamen is not detached from the other nine; while in the plant of the above article these are clearly diadelphous, and the flowers of a purple colour. The mistake evidently arose from the too great weight given to a *primâ facie* likeness in regard to a very peculiar habit common to both the species, as well as to the curious purple stains, which in our plant are however scattered over the whole petiole, while in that of Linnæus there is only one to each petiole, and that at the base. Nor can our plant be the one intended by Thunberg, where the flowers are described as umbellate, a feature which separates it likewise from that of Linnæus, of which it has been heedlessly made the synonym. We have no reason to think that the species of either Linnæus or Thunberg have been introduced into our collections. The LEBECKIA *contaminata* of the Hortus Kewensis is proved to be the same species as that of the above article by its introducer's sample in the Banksian Herbarium, but not the one intended by either of the original observers, being in fact the INDIGOFERA *filifolia* of Thunberg. The article should be amended as follows;

INDIGOFERA filifolia.

Spotted stalked Indigo.

INDIGOFERA. *Cal.* patens 5-dentatus. *Carina* calcare subulato utrinque notata. *Legum.* oblongum lineare subcylindricum polyspermum; rectum aut incurvum. *Frutices aut Herbæ; folia interdùm ternata, rarò simplicia, plerùmque impari-pinnata; foliola in quibusdam articulata et basi aristata more Phaseoli; stipulæ à petiolo distinctæ; pedunculi axillares* 1-2-*flori aut sæpiùs spicato-multiflori. Legum. ovatum breve 2-spermum in* I. enneaphyllâ. *Species plurimæ tinctoriæ.* Jussieu gen. 359.

I. *filifolia*, foliis simplicibus filiformibus, floribus racemosis. *Thunb. prod.* 132.
Indigofera filifolia. *Willd. sp. pl.* 3. 1220.
Lebeckia contaminata. *Hort. Kew. ed.* 2. 4. 261; *(non verò aliorum).*
Spartium contaminatum. *Hort. Kew.* 3. 10; *(non verò Linnæi).*

The rest of the article should remain as it is; the synonymy and names being altered as here. We should observe, that when the plant is young, it is far less glaucous than when old, and has always a few smooth shining pinnate leaves here and there, and the racemes are more closely and numerously flowered. As the plant advances in age, the foliage is reduced wholly to bare petioles, the shrub grows long and straggling, and very glaucous, and the racemes fewer flowered, as we see them in the figure of this work. We have met with various specimens of it at Messrs. Lee and Kennedy's, at Messrs. Whitley and Co.'s, at Mr. Knight's, and at Mr. Burchell's, all lately raised from Cape seeds.

NOTES.

Convolvulus *suffruticosus*, *Vol.* 2, *fol.* 133; *and* Convolvulus *pannifolius*, *fol.* 222, *of this volume.*

Mr. Herbert, who has given peculiar attention to the hybrid intermixtures as well as seminal variations of species, writes to us, that he is convinced that the latter of the above two plants is purely a seminal variety of CONVOLVULUS *canariensis*; and that he suspects the first to be another variety of the same. Upon this head we can take no responsibility to ourselves; we have recorded them as distinct because they really differed, and we found them so recorded in books of the first authority. But experience is the certain test of variety and species; and if *pannifolius* has been raised from the seeds of the true *canariensis*, there is an end of the question. We are highly obliged to Mr. Herbert for the communication, as well as much other valuable assistance.

Hyoscyamus *canariensis*. *Vol.* 3. *fol.* 180.

Since the publication of the above article, we have had an opportunity of inspecting the corolla, and of making the subjoined addition to the description.

Cal. *semuncialis turbinatus.* Cor. *subexcedens unciam, erecta, angustè infundibuliformis, elongata, extùs viscoso-pilosa, nervoso-striata, venoso-reticulata:* tubus *multotiès longior limbo, luridus:* limbus *rotato-campanulatus, bilabiato-obliquus, lobis tribus summis oblato-rotundis, imis duplo angustioribus ab invicèm profundiùs divisis.* Fil. *subinæqualia, paulò breviora flore, infernè alba, pilosiuscula, supernè violacea:* anth. *ovatæ, didymæ, erectæ, ochroleucæ, introrsùm versæ.* Stylus *violaceo-purpurascens, filiformis, glaber:* stig. *bilobo-subpileatum, lobis brevibus rotundatis, replicatis, puberulis, purpureis.*

Donia *glutinosa*. *Fol.* 187.

For the reasons why the generic title of DONIA should be exchanged for that of GRINDELIA, see the 248th article in this volume. In the above, for DONIA read GRINDELIA.

Silene *pensylvanica*. *Suprà fol.* 247.

The English text of that article, which begins, "The SILENE *virginica* of Linnæus and the SILENE *Catesbæi* of Walter, have been adopted by Willdenow as distinct species," &c.; should have stood as follows:

"The SILENE *virginica* of Linnæus and the SILENE *caroliniana* of Walter, have been adopted by Willdenow (the latter under the title of SILENE *Catesbæi*) as distinct species," &c.

Trapa *natans*. *Fol.* 259.

The generic character omitted in its place in the above article, is added here.

TRAPA. *Cal.* superus, 4-partitus, laciniis acutis. *Cor.* 4-petala. *Stylus* 1; *stigma* emarginatum. *Caps.* nuciformis, 1-sperma, 4-gona, 2-4-dentibus calycinis persistentibus recurvis in spinam induratis armata: *semen* tuberosum. *Herbæ aquis innatantes, caule simplici submerso; folia caulina submersa radiciformia, verticillata, multifido-capillaria: floralia emersæ alterna, petiolo, ne demittantur, ventricoso-cavo; flores solitarii axillares. E superiore capsulæ germinantis poro plumula exurgit, semini indiviso continua, lateribus suprà radicans. An indè semen 1-lobum, et affinitas cum Naïadibus: an potiùs bilobum cum staminibus perigynis et corollâ intra calycem 4-fidum 4-petalâ, indèque Onagris adscribendum genus?* Jussieu gen. 68.

Descriptions of Dissections omitted in their Places.

Hæmanthus *coarctatus*. *Fol.* 181.
a A detached flower of the umbel.

Barleria *mitis*. *Fol.* 191.
a The calyx. *b* A flower dissected vertically. *c* The pistil.

Brunsvigia *Josephinæ*. *β*. *Foll.* 192, 193.
a A dehiscent capsule. *b* A tuberous seed.

Rhododendron *hybridum*. *Fol.* 195.
a A stamen.

Orchis *longicornu*. *Fol.* 202.
a The label and column of fructification detached from the flower.

Ophrys *tenthredinifera*. *Fol.* 205.
a The column of fructification, with a fragment of the label.

Amaryllis *fulgida*. *Fol.* 226.
a The lower portion of the flower dissected vertically.

Brunsfelsia *undulata*. *Fol.* 228.
a A part of the tube of the corolla dissected to show the insertion of the stamens. *b* A portion of the style. *c* The germen.

Clematis *aristata*, *Fol.* 238.
a The stamens with the group of pistils in the centre. *b* The group of pistils.

Ipomœa *obscura*. *Fol.* 239.
a The pistil.

Gnaphalium *apiculatum*. *Fol.* 240.
a A detached floret. *b* The same. *c* The calyx and receptacle freed from the florets dissected vertically.

Campanula *lactiflora*. *Fol.* 241.
a The disk of the germen with the surrounding stamens attached and the style and stigmas in the centre.

Hydrophyllum *canadense*. *Fol.* 242.
a The calyx. *b* The corolla dissected vertically. *c* The pistil.

Duranta *Plumieri*. *Fol.* 244.
a The calyx. *b* The corolla dissected vertically. *c* The pistil.

Bouvardia *versicolor*. *Fol.* 245.
a The calyx. *b* The corolla dissected vertically. *c* The calyx and pistil. There should have been only 4 segments to the calyx, not 5.

Iris *dichotoma*. *Fol.* 246.
a The style, stigmas, and stamens.

Silene *pensylvanica*. *Fol.* 247.
a A detached petal. *b* The stamens and pistil, the latter upon its basement or pedicle.

Grindelia *inuloides*. *Fol.* 248.
a A floret of the ray. *b* A floret of the disk. *c* The calyx and receptacle freed of the florets and dissected transversely.

ERRATA.

VOL. II.

Fol. 148, l. 16 à calce pag. Post verbum "*nutans*" dele 1,
Fol. 174, l. 24. Pro "*duplâ limbi*" lege "*duplâ tubi.*"

VOL. III.

Fol. 180, l. 17 à calce pag. Pro "2" lege "3".

THE END OF VOL. III.

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